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GENERAL

(incl. Statistics)

1. Alberini, C. Programas de los cursos de biología y psicología de la Facultad de Filosofía y Letras de Buenos Aires, dictados en el año 1937. (Programs of the courses of biology and psychology of the Faculty of Philosophy and Letters of [the University of] Buenos Aires, given in the year 1937.) *An. Inst. Psicol. B. Aires*, 1938, 2, 521-524.

2. [Anon.] Wilhelm Stekel; obituary. *Psychoanal. Rev.*, 1940, 27, 506.—G. Brighouse (Occidental).

3. Balz, A. G. A. Concerning the subject matter of psychology. *Psychol. Bull.*, 1940, 37, 554.—Abstract.

4. Brown, W., & Thomson, G. H. The essentials of mental measurement. New York, Cambridge: Macmillan, Cambridge Univ. Press, 1940. (4th ed.) Pp. x + 256. \$5.00.—This edition contains much new material, representing changes in subject and in authors' opinions, since 1925. Part I, psychophysics, includes 4 chapters on mental measurement, probability theory, psychophysical methods, and skewness and heterogeneity in psychophysical data. Part II, correlation, contains 11 chapters covering theory of correlation and discussions of mental organization. There is much critical discussion of Spearman's two-factor and Thomson's sampling theory. 4 new chapters, reprints of recent papers of each author, cover evidence for existence of g , a test of the two-factor theory, recent developments in statistical method in psychology, and the authors' present position on factorial analysis of ability. Appendix A: 5 tables, B: list of probability integrals.—S. B. Sells (Brooklyn College).

5. Chang, T. S. A Chinese philosopher's theory of knowledge. *Yenching J. soc. Stud.*, 1939, 1, 155-191.—This is an English translation, by A. C. Li, of Chang's original paper in Chinese, which appeared in the *Sociological World*, 1938, 10, 17-54, under the title "Thought, language, and culture" (see XV: 364).—C. F. Wu (Academia Sinica).

6. Chen, C. S. [A new method for calculating the arithmetic mean.] *Educ. Rev. (Chinese)*, 1937, 27, No. 6, 87-92.—A new formula for calculating the arithmetic mean in educational statistics is presented as follows:

$$M = \left(dm_1 + \frac{10\sum_1}{N} \right) + \left(dm_2 + \frac{\sum_2}{N} \right),$$

where M is the arithmetic mean; N is the total number of cases; dm_1 and dm_2 are the assumed means of the 10- or second-place figures (1, 2, 3, ... 9) and

the digit- or first-place figures (0, 1, 2, 3, ... 9) respectively; \sum_1 and \sum_2 are the sums of the differences between the assumed mean and the scores of the 10-place figures and those between the assumed mean and the scores of the digit-place figures respectively. According to the author, this new formula yields as accurate results as the commonly

used one, $M = M' + \frac{\sum x}{N}$ (for unclassified data), but it excels the latter in economy of time. It excels another commonly used formula, $M = M' + \frac{\sum fx}{N}$ (for classified data) in accuracy of results, provided the total number of cases is less than 100.—C. F. Wu (Academia Sinica).

7. Chen, H. L. [A textbook of statistics.] Shanghai: Chung Hwa Book Co., 1938. Pp. 938. \$6.00 Mex.—Designed as a textbook for college use, the book deals with the following topics in 14 chapters: introduction; collection of data; tabulation and tables; graphs, diagrams, charts, and maps; arithmetic, geometric, and harmonic means; measures of variation; normal curve and skewness; linear correlation; other measures of correlation; reliability of measures; index numbers; index numbers compiled in Chinese; secular trend; seasonal fluctuations; and business cycles and forecasting. 8 computation tables.—C. F. Wu (Academia Sinica).

8. Chen, L. P. [An outline of statistics.] (4th ed.) Canton: Kwangyü Statistical School, 1937. Pp. 345. \$1.50 Mex.—A revision and enlargement of the 1929 edition. A new chapter on index numbers has been added, and the treatment of measures of central tendency or average and measures of variability or dispersion have been modified. Other important chapters are those dealing with tabular methods, graphic representations, ratios, measures of relationship or correlation, and measures of unreliability. 2 new appendices: (1) an index of formulas and tables used in the book, and (2) Chinese laws and regulations governing statistical affairs and personnel.—C. F. Wu (Academia Sinica).

9. Clark, E. L. Quantitative data on the instability of the means of numerous samples. *Psychol. Bull.*, 1940, 37, 577.—Abstract.

10. Coriat, I. H. Martin W. Peck; obituary. *Psychoanal. Rev.*, 1940, 27, 505-506.—G. Brighouse (Occidental).

11. Cox, G. M., Eckhardt, R. C., & Cochran, W. G. The analysis of lattice and triple-lattice experiments in corn varietal tests. I. Construction and numerical analysis. II. Mathematical theory. *Res. Bull. Ia. agric. Exp. Sta.*, 1940, No. 281. Pp. 66.—A new method of analysis in which inter-block informa-

tion is recovered is shown to result in a notable increase in precision over randomized complete block designs. For both lattice and triple-lattice experiments the mathematical basis is given for estimating the means together with their standard errors, the weights assigned to intra- and inter-block error variance, and the tests of significance. Tables are included indicating the efficiencies to be expected from the use of these designs instead of randomized complete blocks.—*N. R. Bartlett* (Brown).

12. Dayton, N. A. President Frederick Kuhlmann. *Amer. J. ment. Def.*, 1940, 45, 3-7.—This tribute by the past president to the active president of the American Association on Mental Deficiency presents biographical information about Kuhlmann, the psychologist, and includes a bibliography of 57 of his publications.—*M. W. Kuensel* (Children's Home, Cincinnati).

13. Dunlap, K. The postulate of common content. *Psychol. Bull.*, 1940, 37, 553.—Abstract.

14. Dunlap, K. The quarters for psychology at the University of California at Los Angeles. *Psychol. Bull.*, 1940, 37, 588.—Abstract.

15. Dwyer, P. S. The evaluation of multiple and partial correlation coefficients from the factorial matrix. *Psychometrika*, 1940, 5, 211-232.—This paper shows how to compute multiple correlation coefficients, partial correlation coefficients, and regression coefficients from the factorial matrix. Special emphasis is given to computation technique and to approximation formulas. The method is extremely flexible in application since it may be applied to any subset of the original set of observed variables. It is also useful when many of these coefficients are desired.—(Courtesy *Psychometrika*).

16. Farber, M. Edmund Husserl and the background of his philosophy. *Phil. phenomenol. Res.*, 1940, 1, 1-20.—The outer influences, particularly Brentano's, and the inner development of the philosophy of Husserl are discussed. Seven groups of writings, with chief works under each, characteristic of Husserl's work are included as well as a brief section "Toward the future" which introduces a new journal devoted to phenomenological research.—*H. Helson* (Bryn Mawr).

17. Fletcher, J. M. Homeostasis as an explanatory principle in psychology. *Psychol. Bull.*, 1940, 37, 546.—Abstract.

18. Fort, W. C., Jr. Gerald Heard's psychological approach to the problem of the nature of history. *Social Sci.*, 1940, 15, 265-274.—(*Educ. Abstr.* V: 1031).

19. Gault, R. H., & Goodfellow, L. D. Sources of error in psycho-physical measurements. *J. gen. Psychol.*, 1940, 23, 197-200.—Measurements of auditory and vibro-tactile sensitivity were made with the methods of average error, limits, constant stimuli, and "the clinical method." In the last method, the subject pressed a key so long as he detected the presence of the stimulus. The methods differ in reliability because (1) of different definitions

of the threshold and (2) of differential environmental influences. Of the latter type of factors motivation, instructional set, suggestion, different experimenters, and muscle tension are said to influence experimental results. Extensive data will be published in a future paper.—*C. N. Cofer* (U. S. Employment Service).

20. Goodfellow, L. D. The human element in probability. *J. gen. Psychol.*, 1940, 23, 201-205.—Analysis of data from true-false tests, experimental checks for subliminal cues, the Zenith radio telepathy experiments, and experiments involving the measurement of limens by the method of constant stimuli revealed that errors arose from the subject's tendency "(a) to favor one of the alternatives offered him, (b) to alter his responses due to his previous response, and (c) to arrange his responses in an asymmetrical order." There is a discussion of these results in relation to the usual notions of probability.—*C. N. Cofer* (U. S. Employment Service).

21. Griffin, C. H. An empirical study of the validity of the Thurstone multiple factor analysis technique. *Penn. St. Coll. Stud. Educ.*, 1940, No. 22, 25-26.—Abstract.

22. Hartmann, G. W., & Schiller, P. Contemporary Hungarian psychology. *Psychol. Bull.*, 1940, 37, 621-628.—This review summarizes Hungarian psychology under the following headings: psychological organizations and periodicals, medical and educational psychology, economic and military applications, facilities and training for research, representative psychologists and their works.—*A. W. Melton* (Missouri).

23. Humm, D. G. The modal T-score. *Psychol. Bull.*, 1940, 37, 591.—Abstract.

24. Kalif, G. T. Philosophy proper and the philosophy of science. *Psychol. Bull.*, 1940, 37, 544.—Abstract.

25. Landquist, J. *Psykologi*. (Psychology.) Stockholm: Albert Bonnier, 1940. Kr. 2.40.—[Abstracted review; original not seen.] This book is meant as a textbook for Swedish gymnasiums. The author is evidently a representative of the classical dualistic conception of body and soul, in the manner of Du Bois-Reymond, and his psychology is philosophically directed towards indeterminism, acceptance of the freedom of the will, etc. The biological point of view in psychology is left rather vague; "the borderline between mental life and purely biological life is floating; nobody can say at which point consciousness is being lighted within the sphere of biological life." The author is influenced by the Finnish philosopher Kaila and his personality psychology.—*M. L. Reymert* (Mooseheart Laboratory for Child Research).

26. Loemker, L. E. Leibniz's search for adequate psychological categories. *Psychol. Bull.*, 1940, 37, 548.—Abstract.

27. Loewinger, J. Some common errors in the use of the critical ratio. *Psychol. Bull.*, 1940, 37, 592.—Abstract.

28. Macintosh, D. C. *The problem of religious knowledge*. New York: Harper, 1940. Pp. xvi + 390. \$3.50.—Analysis of numerous approaches by many authors to the problem of religious knowledge reveals that the epistemology of religion may be evaluated from the 4 main positions in general epistemology: monistic realism, critical monistic realism, monistic idealism, and dualistic realism; that from one or more of these positions it may be concluded that "in religion at its best there is valid experience of divine reality, making possible religious judgments which can reasonably claim to have knowledge value"; that "within the limits of what is psychologically and logically possible in view of accessible facts" there can be knowledge of God supplemented by a body of reasonable religious belief.—R. B. W. Hutt (Trinity, Hartford).

29. Mason, P. *The X of psychology*. Cambridge: Harvard Univ. Press, 1940. Pp. 211. \$2.50.—From a neo-Kantian viewpoint Mr. Mason attempts to describe the general nature and structure of truth, the nature of mind or the object of psychology, the relation of mind to truth and of psychology to the other sciences, as well as the content and method of psychology. . . . The author believes . . . that psychology as a science has its place in the system of sciences just as mind has a place in the system of truth. His justification for a possible science of mind is based on his analysis of the relation between mind and truth. His main interest in the "X of Psychology" seems to be the task of distinguishing it from and contrasting it with other objects of study, and in "finding a place for it in the system of knowledge which cannot be filled by any other science or branch of knowledge."—(Courtesy *Philos. Abstr.*).

30. McDougall, W. *The riddle of life: a survey of theories*. London: Methuen, 1939. Pp. 279. 7s. 6d.—[Abstracted review; original not seen.] The problem of this last dissertation of McDougall is the differentiation between living and material things. Most of the work is devoted to a critical summary of the various approaches to the problem. He discusses briefly mechanical biology, emergent evolution, and holism. The conception of a living organism which he himself prefers is that of a hierarchy of monads in which physical and psychical activities, though connected with each other, are radically different. "The psychical factor in the life of organisms is of their very essence, and throughout the scale of organic evolution it has become of increasing efficiency."—F. W. Finger (Brown).

31. Montague, W. P. *The ways of things: a philosophy of knowledge, nature, and value*. New York: Prentice-Hall, 1940. Pp. x + 712. \$4.00.—This volume consists of two parts: the first contains "a very condensed but comprehensive survey of the whole field of philosophy, its typical theories and schools of thought, its general problems", and the author's tentative solutions; the second part deals with "special problems of many kinds in the domains of Knowledge, Nature, and

Value" and are reprints of previously published material, some dating back to the early part of the century. The larger part of the book is devoted to the reprints (from page 167 on). The subjects treated in this volume range from formal logic through epistemology, metaphysics, theology, ethics, and aesthetics to democracy at the crossroads. Chapters 13, 14, and 15 on theories of emergent evolution, heredity, and consciousness will be of most interest to the psychologist. The inclusion of questions on each chapter in an appendix shows that the book is intended as a text as well as for general readers whom the author would "arouse . . . to construct a philosophy for themselves."—H. Helson (Bryn Mawr College).

32. Muenzinger, K. F. *Psychology, the science of behavior*. (Rev. ed.) Denver: World Press, 1940. Pp. xiii + 343. \$3.00.—This revision is 77 pages longer than the 1st edition (see XIV: 1161). The principal changes consist in the addition of 3 appendices on the psychology of learning, mind and body, and scientific method in psychology and of an index.—D. M. Purdy (Mills).

33. Musgrave, R. S. *Training observers in the method of teleonomic description*. *Psychol. Bull.*, 1940, 37, 556.—Abstract.

34. Paynter, R. H. *Some aspects of consulting psychology*. *Sch. & Soc.*, 1940, 52, 197-200.—The author suggests for the expansion of consulting psychology: (1) that the A.A.A.P. "recommend that the War and Navy Departments include in their preparations for a national emergency tables of organization for psychological divisions" and (2) "that the A.A.A.P. approach the federal commission and offer to give technical aid in carrying out the psychological features of the national health program, to extend these features and to assist in securing qualified psychologists." He points out in connection with (1) that delay proved costly in the world war and psychological veterans are still living whose recommendations would be valuable, (2) that, while 33% of the population are receiving inadequate or no medical care, probably 90% do not find psychological aid available. The association should aim to expand existing set-ups for mental therapy and to advance national psychological hygiene.—M. Lee (Chicago).

35. Petermann, B. *Neuere Werke zur Psychologie*. (Newer works on psychology.) *Erziehung*, 1939, 15, No. 1/2.

36. Peters, C. C., & Van Voorhis, W. R. *Statistical procedures and their mathematical bases*. New York: McGraw-Hill, 1940. Pp. xiii + 516. \$4.50.—The purpose of this textbook is to explain to non-mathematicians the mathematical origins of widely used statistical procedures. Derivations include all essential steps. Many of the techniques of R. A. Fisher are presented "by explaining them in very simple terms and by showing how they fit in with the older methods." Chapter 1 is called "A little calculus." Chapters 2-11 cover central tendencies, variability, correlation, reliability of

statistics, partial and multiple correlation, factor analysis, the probability curve, and correlation ratio. Chapters 12-15 cover analysis of variance, correlation, chi-square, and curve fitting. Chapter 16 discusses the technique of controlled experimentation. Each chapter concludes with carefully planned exercises and references for further study. 9 reference tables in appendix.—S. B. Sells (Brooklyn College).

37. Pressey, S. L. Fundamentalism, isolationism, and biological pedantry vs. sociocultural orientation in psychology. *Psychol. Bull.*, 1940, 37, 567.—Abstract.

38. Spearman, C. E. Professor Edward Mapother. *Character & Pers.*, 1940, 9, 1-5.—Tribute is paid to the contributions of Edward Mapother in the development of Maudsley Hospital and for the founding of a psychiatry concerned wholly with the observation and study of directly observable phenomena.—M. O. Wilson (Oklahoma).

39. Squires, P. C. The creative psychology of Berlioz. *J. Musicol.*, 1940, 2, No. 2, 76-87.—A biographical study of the great auditory *Eidetiker*, Berlioz.—P. R. Farnsworth (Stanford).

40. Thompson, W. H. A description of the new psychological clinic at the University of Omaha. *Amer. J. ment. Def.*, 1940, 45, 56-58.—Objectives observed when planning the building were: (1) facilities adequate for all kinds of individual testing; (2) opportunity for objective observation of testing, teaching, and other activities by students, teachers, parents, and others who may be interested; (3) provision for improved teaching situations in psychology; and (4) arrangements for research. One-way vision arrangements and hidden microphones in the testing room with loud speakers in the adjoining observation room are features of the arrangement.—M. W. Kuenzel (Children's Home, Cincinnati).

41. Tryon, R. C. A theory of psychological components of individual differences in performance. *Psychol. Bull.*, 1940, 37, 551.—Abstract.

42. Tucker, L. R. A rotational method based upon the mean principal axis of a subgroup of tests. *Psychol. Bull.*, 1940, 37, 578.—Abstract.

43. [Various.] [The National Statistical Union: lectures on statistics.] Shanghai: Chung Hwa Book Co., 1937. Pp. 374. \$2.00 Mex.—This volume consists of 12 lectures on statistics of which the following are of interest: (1) averages, by J. P. Chu; (2) on variations, by J. F. Ch'u; (3) normal curves and probable errors, by Y. P. Ch'eng; (4) correlations, by H. L. Wang; (5) time series, by C. M. Li; (6) tabulation and graphic presentations, by Y. P. Ch'eng; and (7) testing and measurement, by E. Shen.—C. F. Wu (Academia Sinica).

44. Wang, H. L. [Educational statistics.] Changsha: Commercial Press, 1938. Pp. 347. \$2.00 Mex.—An enlargement of the author's syllabus used in the National Central University and in the University of Nanking. The methods considered are the statistics of variables. The

collection and classification of data, construction of graphs and tables, and the methods of study of the point-, range-, and correlation-measures are treated in detail. Statistical formulas and symbols, 13 statistical tables, and statistical terms are appended.—C. F. Wu (Academia Sinica).

45. Zipf, G. K. On the economical arrangement of tools; the harmonic series and the properties of space. *Psychol. Rec.*, 1940, 4, 147-159.—The author analyses the underlying principles of the economical arrangement of tools in an ideal workshop in terms of the harmonic series:

$$FS_n = \frac{F}{1} + \frac{F}{2} + \frac{F}{3} \cdots + \frac{F}{N}$$

(F frequency of usage of the most frequently used tool). He has found other instances of the proportions of the harmonic series in a study of the frequencies of occurrences of words in a stream of speech, of social organization evidenced in the size of communities in the United States, and of the composition of carbon, oxygen, and nitrogen in a protein molecule. He suggests that the generalized harmonic series

$$AS_n = \frac{A}{1^t} + \frac{A}{2^t} + \frac{A}{3^t} + \cdots + \frac{A}{n^t}$$

may be a principle of another organization where values of t from $-\infty$ through 0 may represent the organization of stellar bodies with t representing time passing through $-\infty$ to 0 and values of t from 1 to $+\infty$ representing mental organization.—P. S. de Q. Cabot (Simmons).

[See also abstracts 196, 202.]

NERVOUS SYSTEM

46. Andrenelli, L. [Old and new views on the structure and activity of the frontal lobes.] *Neopsichiatria*, 1939, 5, 172 ff.

47. Bernhard, C. G., & Skoglund, C. R. On the alpha frequency of human brain potentials as a function of age. *Skand. Arch. Physiol.*, 1939, 82, 178-184.—(*Biol. Abstr.* XIII: 16686).

48. Ceni, C. [Qualitative and quantitative elements of thought in interhemispherical relations.] *Neopsichiatria*, 1939, 5, 113-122.

49. Chen, M. P., Lim, R. K. S., Wang, S. C., & Yi, C. L. On the question of a myelencephalic sympathetic centre. VI. Syndrome of lesions of the myelencephalo-spinal sympathetic neuron. *Chin. J. Physiol.*, 1938, 13, 49-60.—Cats and dogs with unilateral lesions of the ventrolateral tract of the spinal cord at the second cervical segment, exhibit a more constricted pupil and pilomotor paralysis on the injured side. With bilateral lesions, there is little external indication of the defect in the cord except the tendency to shiver at room temperatures varying from 20°-34.5° C. The animal's body temperature, pulse rate, respiration rate, blood sugar level, and erythrocyte count are all within the normal range. Only when subjected to extreme conditions, such as exposure to cold for

15 mins. at 0° C. or lower, do signs of the defect become evident. In animals with the cord lesion, erection of hairs failed to take place and the body temperature falls.—C. F. Wu (Academia Sinica).

50. Claes, E. Contributions à l'étude physiologique de la fonction visuelle. I. Analyse oscillographique de l'activité spontanée et sensorielle de l'aire visuelle corticale chez le chat non anesthésié. (Contributions to the physiological study of visual function. I. Oscillographic analysis of the spontaneous and sensory activity of the visual cortex in the unanesthetized cat.) *Arch. int. Physiol.*, 1939, 48, 181-237.—(*Biol. Abstr.* XIV: 8382).

51. Claes, E. Contributions à l'étude physiologique de la fonction visuelle. II. Étude des centres oculomoteurs corticaux chez le chat non anesthésié. (Contributions to the physiological study of visual function. II. Study of the oculomotor cortical centers in the unanesthetized cat.) *Arch. int. Physiol.*, 1939, 48, 238-260.—(*Biol. Abstr.* XIV: 8383).

52. Claes, E. Contributions à l'étude physiologique de la fonction visuelle. III. Activités pupillo-motrices du diencephale et du mésencéphale chez le chat non anesthésié. (Contributions to the physiological study of visual function. III. Pupillomotor activities of the diencephalon and the mesencephalon in the unanesthetized cat.) *Arch. int. Physiol.*, 1939, 48, 261-280.—(*Biol. Abstr.* XIV: 8384).

53. Darrow, C. W., & Gellhorn, E. The electrical conductance of the brain and its significance. *Psychol. Bull.*, 1940, 37, 570.—Abstract.

54. Feng, T. P. Studies on the neuromuscular junction. VII. The eserine-like effects of barium on motor nerve-endings. *Chin. J. Physiol.*, 1937, 12, 177-196.—Toad's sciatic sartorius and sciatic gastrocnemius and frog's muscles soaked in barium solutions and various Ringer concentrations show radically different responses to direct and indirect stimulation. To a single shock applied to the nerve, they may respond by a tetanic contraction lasting several secs., while to a strictly direct stimulus, they give a twitch of normal appearance, though somewhat larger than normal. Further, when tetanized through its nerve at high frequencies, it gives a characteristic response with marked Wedensky inhibition during the period of stimulation and prolonged contracture afterwards, while with direct stimulation no such contracture occurs. Barium thus bears a striking resemblance to eserine in its action on the motor nerve endings. The barium contracture can only be likewise accounted for on the basis of the chemical transmission theory of N-M transmission, but here the principal cause is a continued leakage of AC from the nerve endings after the end of external stimulation, rather than the mere persistence of AC liberated during the stimulation period.—C. F. Wu (Academia Sinica).

55. Feng, T. P. Studies on the neuromuscular junction. VIII. The localized contraction around N-M junction and the blocking of contraction waves

due to nerve stimulation. *Chin. J. Physiol.*, 1937, 12, 331-370.—Wedensky inhibition (W. I.) at the neuromuscular junction resulting from high frequency nerve stimulation has two effects, (1) localized contraction (L. C.) in the innervated portion of the muscle and (2) blocking of the contraction wave (B. C. W.) independently started from a nerve-free portion of the muscle. The present paper reports a detailed study of these effects by recording separately the heat production of the tibial and pelvic portion of the toad sartorius muscle, under a large variety of conditions. In normal muscle there exists a strict parallelism between W. I. and L. C. But the two may be suppressed with varying degrees of completeness by a number of agencies, notably by curare and large excess of calcium. It is concluded that W. I. *per se*, whatever its underlying mechanism, does not cause B. C. W., but does so only by virtue of L. C. it produces.—C. F. Wu (Academia Sinica).

56. Feng, T. P. The relation between the frequency of stimulation and the total electrical response of nerve. *Chin. J. Physiol.*, 1938, 13, 197-208.—The response-frequency curve relating the total electrical response of the toad's and frog's sciatic nerves to the frequency of stimulation in short stimuli of 0.9-4.5 sec. duration (first with silver wire electrodes, freshly chlorided before each experiment, and later with calomel stimulating electrodes) is not of the simple smooth form depicted by Bugnard and Hill but is wavy with recurrent maxima and minima, resembling the complex course of change of the muscular response with the progressive increase of the frequency of indirect stimulation. With nerve at 22° C, there is always a conspicuous minimum at 500-600/sec. An interesting difference of detail between two-way (alternate charge and discharge) and one-way (discharge only) stimulations has been shown. With the former, but not with the latter, the second maximum at about 1000/sec. is as a rule considerably higher than the first maximum at about 500/sec. An explanation of this fact is given.—C. F. Wu (Academia Sinica).

57. Feng, T. P., Li, T. H., & Ting, Y. C. Studies on the neuromuscular junction. XIV. The development of after discharge at the amphibian N-M junctions treated with eserine. *Chin. J. Physiol.*, 1939, 14, 329-336.—Electrical records obtained from isolated toad nerve-sartorius preparation and sciatic-gastrocnemius, *in situ* with intact circulation, demonstrate that eserine-potentiated twitches of amphibian muscle are in fact brief tetani. Two nerve volleys in close succession may produce a much greater amount of after discharge in a eserinated muscle than a single volley.—C. F. Wu (Academia Sinica).

58. Feng, T. P., Li, T. H., & Ting, Y. C. Studies on the neuromuscular junction. XV. The inhibition following eserine-potentiated and post-tetanic facilitated responses of mammalian muscles. *Chin. J. Physiol.*, 1939, 14, 339-356.—New results were obtained showing that in most cases the post-

facilitatory inhibition following the repetitive response of the cat soleus to a single volley after a period of high-frequency tetanization is not reduced but increased by eserine; furthermore the eserine-potentiated twitches themselves leave a more or less prolonged inhibitory phase in their wake. The post-tetanic facilitated response and the eserine-potentiated response are in fact identical in all their essential characteristics. The chief factor underlying both is regarded to be a certain altered state of excitability of the junctional structure. The anticholinesterase action of eserine need not to be an important factor in the phenomenon of eserine-potentiation. The repetitive discharge and the inhibition are considered as probably both the direct consequences of persistent depolarization of the junction rather than one being the consequence of the other.—C. F. Wu (Academia Sinica).

59. Gengerelli, J. A., Warner, A. H., & Sjardema, H. Does the nerve impulse have an external field? *Psychol. Bull.*, 1940, 37, 589.—Abstract.

60. Henry, C. E., Gibbs, F. A., & Knott, J. R. Shifts in the energy-frequency spectrum of the human electroencephalogram during sleep. *Psychol. Bull.*, 1940, 37, 570.—Abstract.

61. Knott, J. R., & Henry, C. E. The 'conditioning' of the blocking of the alpha rhythm of the human electroencephalogram. *Psychol. Bull.*, 1940, 37, 579.—Abstract.

62. Königstein, H. Über Lokalisationsversuche des durch Morphinum ausgelösten "Kratzwerkes" im Zentralnervensystem. (Experiments on the localization in the central nervous system of the "scratch mechanism" as released by morphine.) *Arch. int. Pharmacodyn.*, 1939, 62, 1-13.—[Abstracted review; original not seen.] The scratch reflex in the cat is reduced only after transection of the restiform body.—H. L. Ansbacher (Brown).

63. Lee, L. Y., & Meng, C. W. Studies on the neuromuscular junction. XVII. Observations on the neuromuscular transmission in turtle. *Chin. J. Physiol.*, 1940, 15, 213-218.—The gracilis muscle of the hind leg of the turtle (*Amyda sinensis*, Wiegmann), *in situ* with blood supply, was given indirect stimulations by means of supramaximal condenser charges and discharges. The results show that on the whole the turtle appears to be rather poor material for the study of N-M transmission, as with this muscle the various interesting phenomena of the N-M junction such as eserine potentiation, eserine contracture, and post-tetanic facilitation, are all inconspicuous, due to its relative insensitivity to the contracture-producing action of AC; for eliciting comparable contracture the concentration of AC solution has generally to be some 10 times as great with the turtle muscle as with the toad gastrocnemius. The various effects of guanidine, however, are shown by the turtle muscle quite as strikingly as by the muscles of the toad.—C. F. Wu (Academia Sinica).

64. Li, T. H. Humoral transmission of nerve impulses at central synapses. V. New attempts to

demonstrate the liberation of acetylcholine from the central terminations. *Chin. J. Physiol.*, 1938, 13, 173-186.—A new method of faradic stimulation of the brain-cord preparation *in vitro* (immersed in Ringer solution, 1 cc. containing 0.05-0.10 mg eserine salicyte) has been devised for demonstrating the liberation of acetylcholine from the central nervous system, the identity of AC being proven by various biological tests. In dealing with only a section of the medulla at the level of the vagal centres with both vagi intact, the liberation of AC from the level of the central vagal terminations, which requires a certain adequate effective stimulus, has also been demonstrated.—C. F. Wu (Academia Sinica).

65. Lovell, H. W., Czarski, T. J., & Lyman, R. S. The effect of vestibular stimulation on brain nerves. *Chin. J. Physiol.*, 1939, 14, 389-410.—With electrodes placed right and left on the forehead and right and left postcentrally on the scalp, two outstanding features appeared in the electroencephalogram of persons with presumably normal vestibular function as an effect of irrigation of the ears with cold water or of rotation. The first is the production of fast oscillations (20-40 per sec.) which occurred immediately after stimulation of the labyrinth and usually disappeared by the time the nystagmus had stopped. The other is the appearance in some individuals of slow swings of the base line ($\frac{1}{2}$ to $2\frac{1}{2}$ secs. in duration) which came after a varying latent period, having no relation to the duration or intensity of nystagmus, nor to cardiac or respiratory rhythms, lasting many seconds, usually a few mins., and then gradually disappearing. The base line swings following vestibular stimulation are to be regarded as a vestibulo-vegetative phenomenon, probably dependent on cervical sympathetic activity which may be excited by labyrinthine stimulation.—C. F. Wu (Academia Sinica).

66. Marx, L. N. A method for quantifying action potentials. *Psychol. Bull.*, 1940, 37, 570.—Abstract.

67. Monnier, A. M., & Coppée, G. Nouvelles recherches sur la résonance des tissus excitables. I. Relation entre la rhythmicité de la réponse nerveuse et la résonance. (New research on the resonance of excitable tissues. I. Relationship between the rhythmicity of the nervous response and resonance.) *Arch. int. Physiol.*, 1939, 48, 129-180.—(*Biol. Abstr.* XIV: 8390).

68. Parker, G. H. A modern conception of the action of the nervous system. *Science*, 1940, 92, 319-323.—Evidence is presented that neurohumors are present in many parts of the nervous systems of many organisms and that they are associated with the activation of chromatophores. That they serve in many regions as a means of synaptic transmission is probable, but it is not maintained that they are the exclusive means of nervous transmission at these junctions. It is pointed out that the neurohumoral theory will easily explain the delay as well as the polarity of synaptic propagation.—F. A. Mote, Jr. (Connecticut).

69. Paulian, D., & Constantinescu, G. G. [Electroencephalography as a tool of investigation of brain functions.] *Spitalul*, 1939, 59, 1-4.—German summary p. 33.

70. Pennington, L. A. Cortical function in the mediation of responses to a tone. *Psychol. Bull.*, 1940, 37, 575.—Abstract.

71. Porta, V. La teoria chimica della trasmissione degli impulsi nervosi. (The chemical theory of conduction of nervous impulses.) *Rass. Neur. veget.*, 1939, 1, 434-464.—[Abstracted review; original not seen.] The electrical and chemical manifestations are probably only different aspects of the same phenomenon.—H. L. Ansbacher (Brown).

72. Quercy, P., & Lachaud, R. de. Sur la structure du chiasma optique humain. (The structure of the optic chiasm in man.) *Rev. Oto-Neuro-Ocul.*, 1939, 245-253.—[Abstracted review; original not seen.] The authors find that the actual anatomy of the optic tracts does not support Johannes Müller's theory of binocular vision.—H. L. Ansbacher (Brown).

73. T'ang, Y., & Wu, C. F. The effects of bilateral labyrinthectomy in albino rats. *Proc. Chin. Physiol. Soc.*, 1937, 10, 33-34.—The two non-auditory labyrinths of an albino rat were destroyed at one stage. The rat did not show any asymmetrical symptom, as is usual with a unilaterally labyrinthectomized rat. Instead, there appeared the following results: The body became very flat, with all legs, especially the hind ones, much abducted, thus assuming a broad-based posture. When the rat moved, there was marked nystagmus of the head. Often the forebody also swung to right and left alternately, following the lead of the head. The rat showed a tendency to move backward and could not right itself from a supine position during free falling through the air or orient itself in the water. When the rat has been rotated horizontally either clockwise or counter-clockwise, there is no reaction in the form of ocular nystagmus or head bending.—C. F. Wu (Academia Sinica).

[See also abstracts 89, 183, 185, 186, 187, 205.]

RECEPTIVE AND PERCEPTUAL PROCESSES

74. Allen, F., & Schwartz, M. The effect of stimulation of the senses of vision, hearing, taste, and smell upon the sensibility of the organs of vision. *J. gen. Physiol.*, 1940, 24, 105-121.—Red light, sound, quinine, and odors, all depress the red sensation and enhance the green, the violet sensation being variable. These results strikingly confirm Young's theory of color vision. Loud and weak tones of the same low pitch evoke opposite responsiveness in the eye. These experiments demonstrate that a central sensory area oscillates in sensitivity when the receptors of other sense organs and also the receptors to which it is directly attached are stimulated; also, while the law of specific energy is not impugned, the quality of response of any one organ is modified by stimulation

of other receptors. They seem to deal with those modes of behavior of the central organs which lie at the basis of conditioned reflexes and to contribute an additional method for their study. Since the field of consciousness, to the extent to which it is based on fluctuating responses of an interlocked sensory system, can scarcely remain constant, these experiments may afford some physiological basis for Gestalt psychology.—M. E. Morse (Baltimore).

75. Auersperg, A. Blickbewegung und optischer Erfassungsakt. (Eye-movements and act of visual apprehension.) *Z. ges. Neurol. Psychiat.*, 1939, 165, 209-213.—In voluntary eye-movements of pursuit and exploration, we aim at a new adjustment with respect to the phenomenal field of vision and not to the retinal image. At the outset, the object to be followed, or to be newly fixated, has peripheral unclarity; at the end it is clear. A voluntary movement has future-directedness; and before we begin it, we extrapolate into the future the continued existence of the object we are concerned with. Thus a pre-constructing disposition comes into play. This, although founded on our past vision of the object, can be more or less creative. Thus, in exploratory movements, there is not only extrapolation of individual identity but some degree of creative pre-construction of the form and character of the (initially vague) goal-object. Pathological cases (with hallucinations in addition to oculomotor abnormality) and experiments on normal vision show that pre-constructive processes can strongly influence the apparent locations and forms of things in the seen world.—D. M. Purdy (Mills).

76. Beasley, W. C. Correlation between hearing loss measurements by air conduction on eight tones. *J. acoust. Soc. Amer.*, 1940, 12, 104-113.—(1) Correlation between hearing losses by air conduction is extremely high and regression is linear for the four tones 64, 128, 256, and 512 cycles. For both screening and clinical types of audiometers, any one of these four tones will provide approximately equal predictive value as to acuity of hearing throughout this range. For greater simplicity of audiometer design, a tone near 500 cycles is preferable. (2) Correlation between hearing losses on 1024 and 2048 cycles is higher for females than for males. Since either tone is about equally predictive of the ability to hear speech, a tone in the region of 2000 cycles is preferable. (3) Correlation is lower, dispersion is greater, and regression more irregularly curvilinear for hearing losses on pairs of tones higher in frequency level than 1024 cycles, than for lower tones. Consequently, in hearing tests designed to discover early stages of high tone loss, more than two tones should be provided at levels above 2048 cycles.—S. S. Stevens (Harvard).

77. Beasley, W. C. Characteristics and distribution of impaired hearing in the population of the United States. *J. acoust. Soc. Amer.*, 1940, 12, 114-121.—Data obtained by the United States Public Health Service were analyzed. Hearing loss was correlated with social history, clinical history, age,

sex, and family income. The annual incidence of new deafness cases and other statistics are reported.—S. S. Stevens (Harvard).

78. Betts, E. A. Data on visual sensation and perception tests. Part II. Visual efficiency. Meadville, Pa.: Keystone View Co., 1940. Pp. 66. \$0.25.—Data are presented on a technique for screening out or detecting cases with questionable visual efficiency. The visual efficiency slides of the Betts Ready to Read Tests are used to supplement the usual Snellen Chart for visual acuity. A total of 13,213 subjects were measured. Approximately 93-95% of elementary school and adult subjects pass each of the visual efficiency tests when the slide holder is set at the equivalent of 40 in. Elementary school children are significantly right-eyed, but the difference between right- and left-eye efficiencies decreases as the ages of the subjects increase. Binocular efficiency is greater than monocular both on the Betts Tests and on the Snellen Chart.—L. A. Riggs (Vermont).

79. Brunswik, E. A random sample of estimated sizes and their relation to corresponding size measurements. *Psychol. Bull.*, 1940, 37, 585.—Abstract.

80. Cameron, H. C. Vitamin A and nightblindness: some studies on college students. *Proc. W. Va. Acad. Sci.*, 1940, 13, 28.—Abstract.

81. Collier, R. M. An experimental study of the effects of subliminal stimuli. *Psychol. Monogr.*, 1940, 52, No. 5. Pp. iv + 59.—Subliminal stimuli in the nature of 6 geometric forms were presented visually and cutaneously in an effort to determine the separate and combined effects of such stimulation upon choice responses of human subjects. 3 experiments were conducted to ascertain the size at which visual stimuli became subliminal, the conditions under which unnoticed stimuli would influence responses, and the extent of reinforcing effects of subliminal stimuli applied simultaneously to 2 sense modalities. The subliminal stimuli seemed to operate in modifying responses only under special conditions. Cutaneous pressure stimuli appeared to operate as slight distractions when applied at the same time that a subliminal form was presented in peripheral vision. Subliminal stimuli presented cutaneously were not effective in modifying responses. Simultaneous presentation visually and cutaneously of similar subliminal stimuli seemed to produce no reinforcing effects.—D. G. Ryans (Cooperative Test Service).

82. Crawford, J. E. A test for tridimensional structural-visualization. *J. appl. Psychol.*, 1940, 24, 482-492.—A performance test designed to measure the ability to perceive spacial relationships is described. Validity coefficients of .59 and greater are reported. General population and occupational norms are given.—E. E. Ghiselli (California).

83. Fabritius, H. F. On tests for hearing. *Acta oto-laryng.*, 1940, 28, 522-523.—Abstract.

84. Fisk, L. B., Torkelson, H., & Brown, C. W. The effect of changes in vitamin A content in diet

upon recovery from glare blindness. *Psychol. Bull.*, 1940, 37, 588—Abstract.

85. Forer, B. R. A study of consonant preferences. *Psychol. Bull.*, 1940, 37, 589.—Abstract.

86. Freiman, S. I. [Physiologic norms of depth perception for distance.] *Vestn. Oftal.*, 1940, 16, 262. ff.—[Abstracted review; original not seen.] An evaluation of Litinski's device for measuring depth perception indicates that his proposed norms are valid; normal visual acuity does not assure normal depth perception, but there is a correlation between superior visual acuity and superior depth perception.—D. J. Shaad (Lawrence, Kansas).

87. Grether, W. F. A comment on "The induction of color blindness by a technique of hypnotic suggestion." *J. gen. Psychol.*, 1940, 23, 207-210.—Erickson's interpretation (see XIII: 3643) that hypnotically induced color blindness is "comparable in degree and character with those found in actual color blindness" is questioned. From an analysis of the theory of color receptors, the nature of the Ishihara test, and Erickson's results it is concluded that, while color blindness was hypnotically induced, the visual sensations were different from those accompanying actual deficiency except for the case of total color blindness. That hypnotically induced responses similar to those given by actually color-blind individuals can be produced could have been predicted from the nature of hypnotic suggestion and from the basic principles of the Ishihara test.—C. N. Cofer (U. S. Employment Service).

88. Holway, A. H., Stuart, R. H., Winchell, C. A., & Zigler, M. J. On the psychophysics and neurophysiology of olfaction. *J. gen. Psychol.*, 1940, 23, 65-73.—"Olfactory stimulus-limens for 4 subjects (the writers) were determined by dirhnic and monorhnic presentation of a single smell substance (India rubber), using the method of constant stimuli." 600 responses were secured from each subject. Greater frequency of response to stimulation was found for dirhnic than for monorhnic presentation. Response frequency increased with intensity of stimulation. The limen for dirhnic stimulation was found to be smaller than that for monorhnic stimulation. Neurophysiologically, the number of available elements (number of impulses per unit of time) should be greater for dirhnic stimulation than for monorhnic presentation; this would explain the difference in limens for the 2 modes of presentation. 31 references.—C. N. Cofer (U. S. Employment Service).

89. Householder, A. S. A neural mechanism for discrimination. II. Discrimination of weights. *Bull. Math. Biophys.*, 1940, 2, 1-13.—(Biol. Abstr. XIV: 13238).

90. Householder, A. S., & Young, G. Weber laws, the Weber law, and psychophysical analysis. *Psychometrika*, 1940, 5, 183-193.—In failing to define the units in which the stimulus is to be measured, the Weber law might seem to make no definite assertion, and indeed, it is shown that any single empirical function, supposed to relate a given

stimulus intensity with that intensity which is just noticeably greater, can be put into the Weber form by a suitable change of scale in which the stimulus intensity is to be measured. Nevertheless, it turns out that if different individuals have different Weber functions, when the intensities are measured on a given scale, then it is by no means always possible to transform the scale so that all of the functions can take on the Weber form. Some necessary conditions are given for the possibility of such a transformation when there is at hand a finite number of functions; and, when the functions depend upon a single parameter, the necessary and sufficient condition is easily derived. The same discussion leads to a generalization of Thurstone's psychophysical scale and shows that such a scale is always possible.—(Courtesy *Psychometrika*).

91. Jones, R. C., Stevens, S. S., & Lurie, M. H. Three mechanisms of hearing by electrical stimulation. *J. acoust. Soc. Amer.*, 1940, 12, 281-290.—“In order to determine the relation between the hearing of normal and operated ears, twenty ears lacking tympanic membranes were stimulated electrically. Eleven ears heard pure tones corresponding in pitch to the frequency of the applied voltage; seven heard a buzzing noise whose character was roughly independent of the stimulating frequency. Examination showed that the pure-tone response in the operated ears was purely linear, in contradistinction to the quadratic response of normal ears. Hence, under electrical stimulation normal and operated ears hear by means of two distinctly different mechanisms. The square-law response in normal ears is apparently mediated by an electrostatic action in the middle ear. The linear response in operated ears may or may not be the inverse of the cochlear microphonic. Evidence is presented that direct stimulation of the auditory nerve occurs in those ears which hear a buzzing noise.”—S. S. Stevens (Harvard).

92. Kekcheev, K. X. [The effect of other sensory activities on the visual sense.] *Vestn. Oftal.*, 1940, 16, 246 ff.—[Abstracted review; original not seen.] The effect of auditory, olfactory, taste, tactile, and pain impulses on achromatic and chromatic vision is explained by Orbel's theory that the receptors in the central nervous system are under the influence of the vegetative nervous system, representing a total-response pattern which is phylogenetically older than the response patterns of specialized sense receptors.—D. J. Shaad (Lawrence, Kansas).

93. Labbé, R. [Deaf-mutism: consideration of its causes and genesis.] *Arch. Méd. Enf.*, 1938, 41, 257 ff.—(*Child Developm. Abstr.* XIII: 1347).

94. Landahl, H. D. Discrimination between temporally separated stimuli. *Bull. Math. Biophys.*, 1940, 2, 37-47.—(*Biol. Abstr.* XIV: 13240).

95. Longhi, L. [The influence of the vestibular apparatus on visual perception.] *Riv. Patol. nerv. ment.*, 1939, 54, 291-348.

96. McFarland, R. A., & Forbes, W. H. The effects of variations in the concentration of oxygen

and of glucose on dark adaptation. *J. gen. Physiol.*, 1940, 24, 69-98.—The experiments were conducted in a light-proof chamber in which the composition of the air could be varied. Lowered oxygen tensions produced decreased sensitivity, affecting similarly both the rod and the cone portions of the dark adaptation charts. With normal composition of the air, ingestion of glucose caused no changes except toward the end of the tolerance tests. If, however, glucose was ingested at the end of an experiment in anoxia, the effects of the anoxia were counteracted within 6-8 minutes. Insulin injections raised the threshold, and subsequent inhalation of oxygen lowered it. The combined effects of anoxia and hypoglycemia were greater than a similar degree of either one separately. These experiments support the hypothesis that anoxia and hypoglycemia affect light sensitivity in the same way: by slowing the oxidative processes. Hence the effects of anoxia may be ameliorated by giving glucose, and those of hypoglycemia by inhaling oxygen.—M. E. Morse (Baltimore).

97. Morgan, C. T. Concerning the Elsberg-Spotnitz formula for light adaptation. *J. gen. Psychol.*, 1940, 23, 191-194.—Elsberg and Spotnitz (see XIII: 719) “found that the expression, $t \cdot \sqrt{I} = C$ predicts a relatively constant state of light adaptation. An examination of their data indicates that the equation, $t \cdot \log I = C$, fits equally well. The fact that both formulae apply is probably due to the narrow intensity range employed and to the inadequacies of the data for a statistical determination of the relative goodness-of-fit of the two expressions. Since however the formula including $\log I$ does fit satisfactorily and is a basic equation in the description of other visual functions it is considered the preferred equation.”—C. N. Cofer (U. S. Employment Service).

98. Omwake, L. Visual responses to auditory stimuli. *J. appl. Psychol.*, 1940, 24, 468-481.—A study of the auditory-visual relationships in children indicated that patterns of tones and musical selections were significantly related to geometric patterns and to colors. Changes in these associations with age are discussed.—E. E. Ghiselli (California).

99. Payne, B., & Davis, R. C. The role of muscular tension in the comparison of lifted weights. *Psychol. Bull.*, 1940, 37, 569-Abstract.

100. Raymont, J. E. G. Dark adaptation and reversal of phototropic sign in *Dineutes*. *Biol. Bull. Woods Hole*, 1939, 77, 354-363.—(*Biol. Abstr.* XIV: 13222).

101. Ruckmick, C. A. The frequency of color blindness. *Psychol. Bull.*, 1940, 37, 568.—Abstract.

102. Sanders, J. [The heredity of total color blindness.] *Ned. Tijdschr. Geneesk.*, 1939, 1939-1943.—[Abstracted review; original not seen.] 20 totally color-blind patients of ophthalmologists descended from 16 pairs of parents. Of a total of 34 male children of these parents 9, and of a total of 50 female children 11 were afflicted. The author believes that such an equal distribution of color

blindness between the sexes is probably the general rule. English and French summaries.—H. L. Ansbacher (Brown).

103. Spence, K. W. Changes in response of chimpanzees to size stimuli following training on single stimulus. *Psychol. Bull.*, 1940, 37, 570.—Abstract.

104. Steinberg, J. C., Montgomery, H. C., & Gardner, M. B. Results of the World's Fair hearing tests. *J. acoust. Soc. Amer.*, 1940, 12, 290-301.—"The hearing test for musical tones which formed part of the Bell System exhibit at the New York and San Francisco Fairs is described. Average hearing acuity and the frequency of occurrence of various amounts of hearing loss are given as functions of age and sex. The relation of hearing acuity to place of residence, economic status, and certain other factors is discussed briefly. Data from the two Fairs are used to determine the distribution of hearing acuity in the United States population, subject to certain stated limitations. Accuracy of the test is discussed in relation to ability of visitors to understand the test procedure, disturbing effect of background noise, and calibration of the test equipment in terms of ear canal pressure and equivalent free field intensity, and on this basis a comparison is made with the results of other surveys of hearing."—S. S. Stevens (Harvard).

105. Tinker, M. A. Effect of visual adaptation upon intensity of light preferred for reading. *Psychol. Bull.*, 1940, 37, 575.—Abstract.

106. Türk, W. Über die physiologisch-akustischen Kennzeiten von Ausgleichsvorgängen. (The physiological auditory recognition times of equalization processes.) *Akust. Z.*, 1940, 5, 129-145.—"The shortest duration of a tone of 3000 cycles for pitch recognition is 4 msec. If the tone is repeated at constant time intervals the duration of each individual tone may be as short as 3 msec. This confirms the formula of Bürck, Kotowski, and Lichte, for calculating minimal recognition times for tones. In sound events of 10 msec. duration or less the ear reacts to the variety of the frequency spectrum as a whole, as well as to the temporal sequence of characteristic sections within the sound event."—P. L. Krieger, (Leipzig).

107. Wallace, S. R., Jr. Intensity discrimination in the peripheral retina. *Psychol. Bull.*, 1940, 37, 552.—Abstract.

108. Wallach, H. The role of head movements and vestibular and visual cues in sound localization. *J. exp. Psychol.*, 1940, 27, 339-368.—Experiments of synthetic production of sound directions are reported which show that either vestibular cues or visual cues can replace head movements as such. In one group of experiments the blindfolded subject localized the sound while he was passively turned on a revolving chair, and in the other group the subject observed the direction of sound while seated inside a revolving screen. The results indicate that (1) fairly accurate representation of the actual displacement of the head is furnished by vestibular

stimulation and that (2) visual stimulation, equivalent to that which actual displacement of the head would give, suffices to determine the direction of sound.—H. W. Karn (Pittsburgh).

109. Weigert, F., & Morton, J. W. [Photochemical studies on color vision.] *Ophthalmologica*, 1940, 99, 145 ff.—[Abstracted review; original not seen.] Gelatin films were impregnated with visual purple extracted from the retinae of frogs, producing artificial retinae. The determination of color graphs for photochemically effective wave lengths is the first objective method for defining the hue of a colored light independent of a human observer. If the artificial retina is exposed to red light, it becomes blind for red, but retains its sensitivity over the rest of the spectrum.—D. J. Shaad (Lawrence, Kansas).

110. Weitz, J. Skin temperature and vibratory sensitivity. *Psychol. Bull.*, 1940, 37, 553.—Abstract.

111. Wever, E. G., Bray, C. W., & Lawrence, M. The interference of tones in the cochlea. *J. acoust. Soc. Amer.*, 1940, 12, 268-280.—"A new phenomenon, which is called tonal interference, is revealed by the electrical responses of the cochlea as a reduction of the response to one tone due to the simultaneous presentation of another. This phenomenon is distinct from masking, as shown particularly in two features: (a) it occurs between tones of any frequency, while masking is limited to tones in the region of the masking tone and its harmonics; and (b) it is shown in the cochlear responses and hence is peripheral in origin, while masking is not revealed in these responses and evidently is a consequence of nervous action." Interference is discussed in relation to the intensity and frequency of the stimulus, and in relation to conduction, distortion, overloading, sensitivity, and other aspects of the hearing process.—S. S. Stevens (Harvard University).

112. Zoethout, W. D. *Physiological optics*. (3rd ed.) Chicago: Professional Press, 1939. Pp. 406. \$5.00.—(See II: 50).

[See also abstracts 50, 72, 127, 188, 211, 212, 405, 439, 444, 454, 466, 613.]

LEARNING, CONDITIONING, INTELLIGENCE

(incl. Attention, Thought)

113. Ai, W. [On the experimental studies of psychology of learning Chinese characters.] *Educ. News Wkly* (Chinese), 1938, No. 9, 5-8; No. 10, 10-14.—Among the problems confronting the learning of Chinese characters, the following two have been considered by the author as the most important, (1) size of vocabulary and (2) structure of the characters. By means of the quadruple-choice technique, a measurement of the mastery of the sound and meaning of Chinese characters has been conducted on 3580 students from 29 schools in Nanking and Hangchow (including 1015 elementary-school, 1382 junior high-school, and 1183 senior high-school pupils). The results show the trend of improvement

clearly, the average size of vocabulary (number of Chinese characters with both their sound and meaning fully mastered) for the different grades tested being as follows:—

Elem. Sch.	Grade VA	VB	VIA	VIB
	2110	2461	2988	3396
Junior High Sch.	Class IB	IIB	IIIB	
	4622	4887	5114	
Senior High Sch.	Class IB	IIB	IIIB	
	5473	5632	5862	

For all 10 grades tested, the sound of Chinese characters was always better learned than their meaning. The difficulty or ease of the form of Chinese characters depends upon two conditions, number of strokes in a character, and its structural form. The correctness of reproduction of the form of a Chinese character is determined by 10 factors, the intrinsic ones being the number of strokes involved, complexity of its structural form, with or without mistakes in writing characters similar in form and characters similar in sound. In conclusion, the author suggests that the so-called simplified Chinese characters may be employed. 3 principles of simplification of the structural forms of Chinese characters have been outlined. (See XV: 575.)—C. F. Wu (Academia Sinica).

114. Ai, W. [A study of the relationship between the frequently-used Chinese characters and their form, sound, and meaning.] *Teach. Learn. Mon.*, 1938, 3, No. 5, 20-24.—An analysis of the data obtained from a measurement of 200 Chinese characters administered to 10 grades of 100 students each, from elementary-school grade VB to senior high-school class IIIB inclusive, showed that the scores for the sound and meaning of these frequently-used characters correlated positively, but not highly, with their frequency of use, the coefficients being 0.365 and 0.425 respectively. (The score for each character representing the average score of 1000 students tested.) In another measurement of more than 110 Chinese characters administered in 14 tests to more than 140 persons of little education, it was found that the scores for the form of these frequently-used characters gave a correlation of 0.189 with their frequency of use. (The score for each character is the average score of more than 10 persons.) The author concludes that the frequency-of-use factor should be given proper consideration, but should not be over-emphasized to the neglect of other factors like form, sound, and meaning.—C. F. Wu (Academia Sinica).

115. Bickley, A. W. Intelligence diagnostics of certain animal learning problems adapted to human subjects. *Psychol. Bull.*, 1940, 37, 552.—Abstract.

116. Biel, W. C. Early age differences in maze performance in the albino rat. *J. genet. Psychol.*, 1940, 56, 439-453.—Using a straightway for preliminary training and a 6-choice-point T-maze for the experiment proper, 4 split-litter groups of albino rats (total N = 115) of both sexes were required to swim from starting place to goal. Start-

ing the groups at 16, 19, 22, and 29 days of age, 2 trials per day were given until 24 runs had been made. Each group was superior to younger and inferior to older animals and all group differences in time, errors, and trials to reach a criterion were significant, except those between the 19- and 22-day groups for the last two measures. The factors affecting such performances are discussed.—D. K. Spelt (Mississippi).

117. Boas, F. Evidence on the nature of intelligence. *Harv. educ. Rev.*, 1940, 10, 144-149.—(*Educ. Abstr.* V: 961).

118. Brogden, W. B. Conditioned flexion responses in dogs re-established and maintained with change in locus in the application of the unconditioned stimulus. *Psychol. Bull.*, 1940, 37, 571.—Abstract.

119. Bromer, J. A., & Meisel, H. S. A comparison of incidental and purposeful memory for meaningful and nonsense material. *Psychol. Bull.*, 1940, 37, 579.—Abstract.

120. Buegel, H. F. The effects of three different ideational elements upon the learning of a patterned motor performance. *Psychol. Bull.*, 1940, 37, 580.—Abstract.

121. Canady, H. G. Reliability of testimony for visual observations. *Psychol. Bull.*, 1940, 37, 575.—Abstract.

122. Cason, H. The influence of diseases on psychological efficiency. *Psychol. Bull.*, 1940, 37, 586.—Abstract.

123. Chang, S. T. [Studies on the most economical methods of learning.] Nanking: Cheng Chung Book Co., 1937. Pp. 49. \$0.15 Mex.—A review of the literature on experimental studies of the whole and part methods of learning, including motor learning, learning of nonsense syllables, etc., and learning of poetry and prose. Bibliography.—C. F. Wu (Academia Sinica).

124. Chou, H. C., & Lee, A. T. [A further experiment on the relative efficiency of learning complicated (original) and simplified Chinese characters.] *Educ. Rev.* (Chinese), 1937, 27, No. 5, 69-90.—In order to meet the criticism that the subjects tested in the previous experiment (see XII: 1196) have been habituated to and thus favorable to the complicated rather than to the simplified Chinese characters, a more extensive and better controlled experiment has been conducted on the elementary school beginners and the illiterate, using new testing material but with the same objects in view. 86 children (52 boys and 34 girls, average age 8.3 years) were selected from grades I (74 pupils) and II (12 pupils) in 3 elementary schools and divided into two paired groups. Each pair was composed of pupils who were not familiar with the same 40 complicated characters and the corresponding 40 simplified characters out of a list of 324 Chinese characters promulgated by the Ministry of Education. Each set of characters was printed on separate sheets of 20 characters respectively. 50 adult illiterates

(20 men and 30 women) were selected from 3 villages and also divided into two paired groups. The present results obtained from both children and adults are in accord with the previous ones and show that the complicated characters are superior to the simplified ones for (1) recognition or immediate memory, (2) retention after 1, 2, 3, and 5 week intervals, and (3) accuracy of reproduction. The complicated (original) Chinese characters are not more difficult to recognize, retain, or reproduce than the simplified ones, and thus a reform of Chinese characters is not necessary.—C. F. Wu (Academia Sinica).

125. Crannell, C. W. Uncontrolled path elimination and the delayed response in rats. *Psychol. Bull.*, 1940, 37, 587.—Abstract.

126. Dahle, C. O. The verbal thought and overt behavior of children during their learning of long division. *J. exp. Educ.*, 1940, 9, 1-8.—The special apparatus used in this investigation included a motion-picture camera, a psychogalvanometer, and an Iowa Oral Language Machine which recorded the verbal reports of the subject. Instrumental data together with written solutions were obtained from 16 fourth-grade subjects during their learning of long division. The findings are reported in the form of 45 summary statements which indicate the nature of the inner and outer disturbances that accompany the learning process.—H. W. Karn (Pittsburgh).

127. Ellson, D. G. Sensory conditioning. *Psychol. Bull.*, 1940, 37, 588.—Abstract.

128. Evans, S. D. The evolution and regression of correct choices in the double alternation problem of the temporal maze. *Psychol. Bull.*, 1940, 37, 571.—Abstract.

129. Freeman, G. L. The effect of certain and uncertain barriers upon the behavior of rats. *J. gen. Psychol.*, 1940, 23, 211-216.—With food as a lure, rats were trained to traverse a series of water maze units by jumping from a starting platform to another platform placed midway in the water trough and thence to the end platform of the unit. Certain barriers were mid-trough platforms which supported the rat's weight, whereas uncertain barriers would not do so. Performance was measured by number of approaches to the barrier, number of superfluous activities, number of units per day in which the rat jumped to the platforms, and time spent per unit. 4 groups of animals (18 in all) were trained in various ways on this apparatus. The more training an animal received on certain barriers the more was his behavior disrupted when he encountered uncertain ones and even after he had returned to the certain barriers. When animals were trained initially on uncertain barriers, they showed improved performance on transfer to certain ones.—C. N. Cofer (U. S. Employment Service).

130. Galt, W., & Warden, C. J. An experimental study of retention and "generalization" in the New World monkey. *Psychol. Bull.*, 1940, 37, 552.—Abstract.

131. Gantt, W. H. The rôle of the isolated conditioned stimulus in the integrated response pattern,

and the relation of pattern changes to psychopathology. *J. gen. Psychol.*, 1940, 23, 3-16.—Conditioned salivary responses were established in 4 dogs to sequences of stimuli made up of (1) a bubbling sound (Bu) and (2) beats of a metronome (M20). For training one dog Bu and M20 were regularly alternated, reinforced by 2 gms. and 12 gms. of food, respectively. M20 caused the greater conditioned secretion. Subsequently, when M20 was used alone and repeated in a series, the conditioned secretion showed a regular alternation in quantity as in the training series. This result was also observed in 2 other normal dogs when time intervals were varied to obviate the establishment of time reflexes. No transfer from alternation of stimuli to a repetition of one of them was found in a dog with partial cortical ablation and in another which was stimulated by a more complex sequence. Stability of the animal is related to the ability to be conditioned to the series as a whole. The experiments show that "there is acting on the organism not only the individual stimulus in its own right but the context, the whole environmental setup, in which it occurs."—C. N. Cofer (U. S. Employment Service).

132. Gibbons, H. The ability of college freshmen to construct the meaning of a strange word from the context in which it appears. *J. exp. Educ.*, 1940, 9, 29-33.—The data from this investigation indicate that: (1) The construction of word meanings from context is a specific ability which students possess in varying degrees. (2) The clues to be used in constructing the meaning of unknown words are not inherent in specific words, phrases, or sentences; they are merely represented by these symbols. (3) Students who possess the ability to construct word meanings from context tend to have better vocabularies and higher intelligence than those without this ability. (4) An analysis of the nature of the clues represented in the context indicates that the construction of word meanings from context depends upon: (a) the ability to see relationships between word, phrase, and sentence meanings in the context, (b) the ability to infer meanings from those contained in the context, and (c) language facility in paraphrasing the meanings in the context. Thus, reading which involves the construction of word meanings, and perhaps other meanings, is a thinking process and involves certain language skills.—H. W. Karn (Pittsburgh).

133. Gilhousen, H. C. Final goal vs. sub-goal distance discrimination. *Psychol. Bull.*, 1940, 37, 589.—Abstract.

134. Gilliland, A. R. Some factors in time estimation. *Psychol. Bull.*, 1940, 37, 580.—Abstract.

135. Goodenough, F. L. Can we influence mental growth: a critique of recent experiments. *Educ. Rec.*, 1940, 21, Suppl. 13, 120-143.—A criticism of some of the recent studies of the environmental influences and their effect upon mental growth. Sources of error found among these studies include failure to take account of regression errors, low predictive value of tests for early ages, failure to

- observe standard conditions of matching, and drawing unwarranted conclusions.—F. C. Paschal (Vanderbilt).
136. Gordon, K. Theory of imagination in the *Iliad* and *Odyssey*. *Psychol. Bull.*, 1940, 37, 590.—Abstract.
137. Gould, R., & Lewis, H. B. An experimental investigation of changes in the meaning of level of aspiration. *J. exp. Psychol.*, 1940, 27, 422-438.—In general, the results of this experiment show that performance scores and aspiration estimates on general information tests can be influenced by telling the subject beforehand an average performance score made by a certain social group on the same tests. For example, if a subject is told that a group of WPA workers made a score of 12 on the test, that subject's performance score and aspiration estimate will probably differ from those made when he is told that the score of 12 was made by college professors or his own classmates.—H. W. Karn (Pittsburgh).
138. Guetzkow, H. Analysis of individual differences on the basis of the parameters of a rational learning equation. *Psychol. Bull.*, 1940, 37, 579.—Abstract.
139. Gurnee, H. Comparative retention of open and closed visual patterns. *Psychol. Bull.*, 1940, 37, 568.—Abstract.
140. Harlow, H. F. The effects of incomplete curare paralysis upon formation and elicitation of conditioned responses in cats. *J. genet. Psychol.*, 1940, 56, 273-282.—After intra-venous injection of curare, each of 11 cats was subjected to 10 training trials for delayed conditioning in which a bell (CS, 4 secs. duration) was always followed by electric shock (US, 1 sec. duration) delivered to the left front leg. Following recovery from the drug, the bell (CS) was presented alone 5 times. Conditioned flight responses could not be established even when paralysis was quite incomplete, although in 4 animals at least 1 response to the bell appeared after recovery (latent conditioning). Conditioned pupillary reactions were more readily set up in partial paralysis and much more frequently excited after recovery. The data suggest that curare (1) is a cerebral depressant (and all logs of learning capacity so far reported under curarization can be thus accounted for); (2) may affect differently the various components of a complex reaction, as well as the separate processes of formation and elicitation of CR's.—D. K. Spelt (Mississippi).
141. Hertz, P. *Sprache und Logik*. (Language and logic.) *Erkenntnis*, 1939, 7, 309-324.—[Abstracted review; original not seen.] In criticism of Carnap the author maintains that logic has nothing to do with language as such. He then deals with the question as to whether logical statements are based on or are independent of experience. Many formulas are presented.—H. L. Ansbacher (Brown).
142. Hertzman, M., & Festinger, L. Shifts in explicit goals in a level of aspiration experiment. *J. exp. Psychol.*, 1940, 27, 439-452.—Performance scores, aspiration estimates, and difference scores between performances and aspirations were obtained on 20 male college students using several trials of a synonyms test and an information test. In the first session of the experiment, positive difference scores were obtained for the majority of the subjects. In a second session, each subject was informed of the average performance and average estimate of a fictitious group of 50 fellow students at the end of each trial in each of the two tasks. Actually the performance level of the fictitious groups was equal to the subject's own performance obtained in the first session while the estimate of the group was in the direction opposite to that of the subject. As a result the difference scores of the subjects while remaining slightly positive were reliably reduced in magnitude.—H. W. Karn (Pittsburgh).
143. Hilgard, E. R., Sait, E. M., & Margaret, G. A. Level of aspiration as affected by relative standing in an experimental social group. *J. exp. Psychol.*, 1940, 27, 411-421.—Experiments were conducted with subjects working in groups consisting of 3-6 members. The task assigned was successive subtraction. After each trial the experimenter announced the time required, and the subject made a private estimate of the time which would be required on the next trial. In Series A, materials were of equal medium difficulty in the first 3 trials, but there followed 8 trials in which for a third of the subjects the materials became easier; for a third more difficult; and for the last third they remained the same. Results showed a tendency for those with easy materials to estimate their performance poorer than they actually were, and for those with hard materials to estimate their performance better than they actually were. In Series B, materials were of equal difficulty for the members of a group, so that relative position was determined by arithmetical ability rather than by differences in material. Trends similar to those of Series A were shown. Since estimates were made privately, group pressure can explain the tendency to estimate towards the mean of the group only if the desire for social conformity is somehow internalized.—H. W. Karn (Pittsburgh).
144. Horne, E. P. A composite curve for the analysis of the form of the practice function. *Psychol. Bull.*, 1940, 37, 577.—Abstract.
145. Hudson, B. B. Extinction of the avoidance behavior of rats to strange objects. *Psychol. Bull.*, 1940, 37, 591.—Abstract.
146. Humphreys, L. G. The strength of a Thorndikian response as a function of the number of practice trials. *Psychol. Bull.*, 1940, 37, 571.—Abstract.
147. Husband, R. W. The influence of a wide range in intelligence on intercorrelations among learning abilities. *Psychol. Bull.*, 1940, 37, 580.—Abstract.
148. Kellogg, W. N. Constant motivation during the conditioning of dogs. *Psychol. Bull.*, 1940, 37, 571.—Abstract.

149. Lumsdane, A. A. Criteria of the ease and extent of conditioning. *Psychol. Bull.*, 1940, 37, 592.—Abstract.

150. Melton, A. W. A comparison of proactive and retroactive inhibition in terms of retention scores and the frequency of overt interlist erroneous intrusions. *Psychol. Bull.*, 1940, 37, 579.—Abstract.

151. Miller, J. Conditioned eyelid responses to serial stimulation. *Psychol. Bull.*, 1940, 37, 593.—Abstract.

152. Nissenson, M. Words as configurations. *Psychol. Bull.*, 1940, 37, 568.—Abstract.

153. Parmenter, R. The influence of degrees of freedom upon stereotyped conditioned motor reflexes in the sheep. *J. gen. Psychol.*, 1940, 23, 47-54.—A castrated male sheep, which had effected and maintained the bell (unreinforced) and buzzer (reinforced by shock) differentiation and gave a very precise conditioned motor response in a restricted situation, was given relative freedom in the paddock. Stimuli could still be given and the response recorded. "The predictability of response, its episodic character, and its stereotyped form . . . disappeared completely when the animal was moved from the habitual environment of the Pavlov frame and was given considerable liberty of locomotion. Walking or running, in some cases, supplanted the usual precise flexion of the reaction limb when the reinforced conditioned signal was presented. During other presentations of this signal, the conditioned motor response was suppressed." Protocols and kymograph recordings are presented.—C. N. Cofer (U. S. Employment Service).

154. Parmenter, R. Avoidance of nervous strain in experimental extinction of the conditioned motor reflex. *J. gen. Psychol.*, 1940, 23, 55-63.—Extinction of a conditioned motor reaction in a sheep was found to be more rapid and to involve less behavior disturbance when the duration of the conditioned stimulus in extinction trials was terminated just prior to the occurrence of the response than when a predetermined duration of this stimulus was allowed. The latter procedure is the usual one in extinction experiments. The new procedure here described averts response by the animal in the extinction series.—C. N. Cofer (U. S. Employment Service).

155. Remmers, H. H., & Ewart, E. Reliability of multiple choice measuring instruments as a function of the Spearman-Brown formula. III. *Psychol. Bull.*, 1940, 37, 578.—Abstract.

156. Robinson, E. E. An experimental investigation of two factors which produce stereotyped behavior in problem situations. *J. exp. Psychol.*, 1940, 27, 394-410.—The results of this experiment justify the following conclusions: (1) When the chances for the solution of a problem are considered perfect, the time spent on it is strikingly longer than when the chances are all but perfect; similarly, when the chances are viewed as even, the point of resignation is reached earlier, but definitely later than when the

chances are considered very slight. (2) The amount of time spent in a given activity is an inverse function of the number of alternative and equally promising activities which the individual knows are open to him but holds in abeyance while pursuing the given activity. When the subject has but one means of tackling the problem, his perseverance in it is strikingly greater than it is on the first of two attacks; when he has as many as 7, he abandons the first very readily.—H. W. Karn (Pittsburgh).

157. Rose, D. The influences of reversing the relevant cues in a human discrimination problem upon the speed of learning. *Psychol. Bull.*, 1940, 37, 594.—Abstract.

158. Sargent, S. S. Effects of difficulty level upon thinking processes. *Psychol. Bull.*, 1940, 37, 568.—Abstract.

159. Smith, F. O. The influence of variable time intervals on retention of meaningful material. *Psychol. Bull.*, 1940, 37, 580.—Abstract.

160. Smith, M. B. The generality of level of aspiration as measured by a new technique. *Psychol. Bull.*, 1940, 37, 594.—Abstract.

161. Terman, L. Psychological approaches to the biography of genius. *Science*, 1940, 92, 293-301.—Part I of this article deals with studies of eminent men by biographical methods which, although they supply valuable data, are not considered to be as fruitful of results as information obtained from the study of living persons. Part II is devoted to a group of intellectually superior children first tested in 1922. The majority of this group of 1300 with IQ's of around 150 were given intelligence, school achievement, personality, and medical tests, and personality ratings and personal history data were obtained. At that time they were physically superior and showed no marked unevenness in school achievement. Most were retested in 1928 and again in 1929. Two-thirds are or have been married and the divorce and mortality rates among them are lower than those of the general population. Their intellectual superiority has been maintained, 90% enter college and of these 93% graduate. Over half go into graduate work. Their average income is about \$3000. The range of occupations is wide. The author believes that genius and eminence are far from perfectly correlated and hopes that further study will disclose the circumstances affecting the fruition of human talent.—F. A. Mote, Jr. (Connecticut).

162. Tolman, E. C. Vicarious trial and error in a human discrimination experiment. *Psychol. Bull.*, 1940, 37, 594.—Abstract.

163. Tryon, R. C. Validity of the components of maze ability. *Psychol. Bull.*, 1940, 37, 571.—Abstract.

164. Tuttle, H. S. Creating motives. *J. gen. Psychol.*, 1940, 23, 17-29.—The term conditioning should refer not only to reflexes but should also be used to refer to the acquisition of all learned tendencies, e.g., tastes and standards. Conditioning is identified with Thorndike's law of effect in learn-

ing which is important in education. Therefore, conditioning may be said to be genuine education. It is emphasized that reasoning acts only to indicate means to ends; the desire for the goal comes through conditioning. Education must recognize the importance of the emotional aspects of the child's development.—C. N. Cofer (U. S. Employment Service).

165. Warden, C. J., Fjeld, H. A., & Koch, A. M. Imitative behavior in cebus and rhesus monkeys. *J. genet. Psychol.*, 1940, 56, 311-322.—Using Warden's duplicate cage technique, 3 cebus and 3 rhesus monkeys were tested for imitation in 6 trials on each of 4 problems: (1) pulling a chain to open a door, (2) opening a door by manipulation of a knob, (3) operating a latch and opening a door, and (4) operating 2 latches and opening a door. A raisin was secured every time the door was opened. Each animal showed immediate imitation on the first trial of at least 1 problem; 1 rhesus monkey imitated immediately on the first trial of every problem. Of 144 trials, 76.4% were cases of immediate imitation, the rest showing varying degrees of partial imitation. Tables show the kind of response and time required for each animal on each trial.—D. K. Spelt (Mississippi).

166. Warden, C. J., Koch, A. M., & Fjeld, H. A. Solution of patterned string problems by monkeys. *J. genet. Psychol.*, 1940, 56, 283-295.—The subjects were 3 cebus, 5 rhesus, and 2 spider monkeys. The spider monkeys died during the course of the experiment, but all others were tested on 7 problems ranging from pulling in a single string (training) to selecting an L-shaped roundabout string from 2 other direct strings. The tests were given prior to the heavy noon meal and the food-cup contained either 1 raisin or $\frac{1}{2}$ peanut kernel, according to the animal's preference. Records reveal little consistency of performance from subject to subject on the various tasks but suggest that rhesus monkeys were inferior. Data are summarized in 4 tables.—D. K. Spelt (Mississippi).

167. Warden, C. J., Koch, A. M., & Fjeld, H. A. Instrumentation in cebus and rhesus monkeys. *J. genet. Psychol.*, 1940, 56, 297-310.—3 cebus and 5 rhesus monkeys were first trained to use a wooden rake or T-stick in drawing a food cup to the cage from any of several positions; 2 rhesus monkeys did not learn (440 and 475 trials) and were dropped from the experiment. The remaining animals were then tested on a multiple-rake problem in which the first rake was used to get a second longer one, this to reach another still longer, and so on. Only the last rake in any series secured food. A cebus and 2 rhesus monkeys mastered only the 4-rake problem, but 1 rhesus and 2 cebus monkeys mastered the 8-rake sequence in about 25 trials. Results, presented in terms of number of trials, per cent of successful trials, per cent of perfect trials, and average time per trial are interpreted as suggesting that cebus are superior to rhesus monkeys in such manipulation tests.—D. K. Spelt (Mississippi).

168. Weinstein, B. Problem-solving in monkeys and children: choice from sample. *Psychol. Bull.*, 1940, 37, 581.—Abstract.

[See also abstracts 200, 273, 353, 364, 371, 453, 502, 525, 538, 571, 616.]

MOTOR AND GLANDULAR RESPONSES

(incl. Emotion, Sleep)

169. Becker, R. F. Interference with behavioral development of the incubating chick by oiling the inner shell membrane. *Psychol. Bull.*, 1940, 37, 581.—Abstract.

170. Becker, R. F., & Glick, H. N. An adaptation of the Smedley hand dynamometer for use in measuring voluntary fatigue. *J. exp. Psychol.*, 1940, 27, 453-467.—The instrument described is essentially the Smedley hand dynamometer remodeled to produce a direct recording of the fatigue curve of the muscles involved in successive, forceful gripping. On the basis of testing in an experimental study to be subsequently reported, the authors feel that the apparatus is a decided improvement over the usual ergographic and dynamometric procedures for the following reasons: (1) Contractions are made against an isometric spring thus eliminating the changes in extent of muscle movement with their concomittant changes in muscular nutritional state such as are encountered in isotonic and oxotonic contractions. (2) A true picture of the work decrement in voluntary muscle effort is rendered possible including such phenomena as contracture, treppe, initial spurt, and end spurt when such are present in individual work curves. (3) The mechanical errors which falsify results in ergography and pneumatic recording on the dynamometer are eliminated.—H. W. Karn (Pittsburgh).

171. Billingslea, F. Y. The relationship between emotionality and various other forms of behavior in the rat. *Psychol. Bull.*, 1940, 37, 582.—Abstract.

172. Brezina, E., & others. Klima, Wetter, Mensch. (Climate, weather, man.) Leipzig: Quelle & Meyer, 1938. Pp. 446.—This is an attempt to synthesize borderline material from several fields. The material is treated from the German viewpoint, with a preoccupation with German conditions. Among the topics discussed are human bioclimatics and the philosophy of climatotherapy. Hellpach takes up climate and culture, and psychology and ethnology, emphasizing race, soul, ideology, and world history.—M. E. Morse (Baltimore).

173. Butcher, E. O. The illumination of the eye necessary for different melanophoric responses of *fundulus heteroclitus*. *Biol. Bull. Woods Hole*, 1939, 77, 258-267.—(Biol. Abstr. XIV: 2398).

174. Buxton, C. E. Strength of pull as a symptom of strength of motivation in rats. *Psychol. Bull.*, 1940, 37, 571.—Abstract.

175. Chang, H. C., Huang, J. J., Lim, R. K. S., & Wang, J. A vagus-post-pituitary reflex. VI. Phenomena of exhaustion and recuperation. *Chin.*

J. Physiol., 1939, 14, 1-8.—The present experiment, endeavoring to test the theory of fatigue previously suggested, shows in isolated-head dogs that gradual diminution of the pressor response to repeated vagal stimulation is due to progressive exhaustion of the secretory granules in the pituicytes of the pituitary gland and that recuperation takes place after a suitable period of rest (2 hours). The vagal pressor response in the non-eserinized animal can therefore be taken as a physiological index of secretory reserve of the pituitary gland.—C. F. Wu (Academia Sinica).

176. Chang, H. C., & Lü, Y. M. The light-pituitary reflex. I. Pigmentary response. *Chin. J. Physiol.*, 1939, 14, 249-258.—A normal snake fish (*Ophiocephalus argus*, Cantor) kept in darkness showed a greenish black color. After hypophysectomy, it became paler even in the dark surrounding. It remained pale as long as it was kept over illuminated background. When the eyes were enucleated, the optic stalk ligated, or the optic nerves cut, it became black within 2-3 hours, and remained coal-black under light illumination. The common frog (*R. nigromaculata*) normally appeared greenish gray in color. Under illumination on a white background, its color did not become paler, nor did it do so within 2-4 days after bilateral abdominal sympathectomy. The light illuminated frogs became paler in 45 mins. to 4 hours after hypophysectomy. Within 3-5 hours after enucleation, the frogs became more grayish or darker under illumination on a white background. Such change could not be obtained by blinding the hypophysectomized frogs. Thus, while the fish has an additional sympathetic control besides the pituitary, the frog has not.—C. F. Wu (Academia Sinica).

177. Chang, S. A comparative study of the effect of adrenalin on the blood sugar, blood pressure, denervated heart, nictitating membrane, stomach, iris, hair, and salivary gland in the cat. *Chin. J. Physiol.*, 1937, 12, 397-404.—The minimal quantities of adrenalin that can just cause a perceptible activity in the organs innervated by the sympathetic nervous system in the intact cat were determined for the liver glycogenolytic effect, blood vessels, acutely denervated heart, nictitating membrane, stomach, iris, pilomotor muscles, and salivary glands (arranged in a descending order in their sensitiveness to adrenalin). The results have been tabulated.—C. F. Wu (Academia Sinica).

178. Cooper, J. B. Some aspects of the behavior of lions in captivity. *Psychol. Bull.*, 1940, 37, 587.—Abstract.

179. Dijkstra, B. L'excitabilité électrique dans la condition d'hyperpnée. (Electric excitability in hyperpnea.) *Arch. int. Physiol.*, 1939, 48, 373-404.—(*Biol. Abstr.* XIV: 8385).

180. Elder, J. H., & Nordahl, N. Behavior of green monkeys in a frustrating social situation. *Psychol. Bull.*, 1940, 37, 581.—Abstract.

181. Erickson, M. H. The appearance in three generations of an atypical pattern of the sneezing reflex. *J. genet. Psychol.*, 1940, 56, 455-459.—A

female infant, whose mother and maternal grandmother characteristically displayed paired sneezes, was observed to sneeze twice in succession at the age of 3 weeks. Because such paired sneezes were observed frequently during the next months, records were kept for nearly 4 months of infant and maternal sneezing. Both showed single, paired, triple, and multiple sneezes; paired sneezes were most frequent for both; and the infant displayed occasional reflex sneezes to sudden bright light. For each subject the ratio of single to paired sneezes remained nearly constant at all times.—D. K. Spelt (Mississippi).

182. Fay, P. J., & Middleton, W. C. Judgment of Kretschmerian body types from the voice as transmitted over a public address system. *J. soc. Psychol.*, 1940, 12, 151-162.—An audience attempting to judge the physical build of 9 speakers heard over a public address system scored 20% above chance in identifying 3 men of leptosome build, 22% above chance in indicating 3 men of pyknic build, and 1% above chance in indicating 3 men of athletic build. Voice stereotypes apparently are least frequently used in judgments of men of athletic build and most frequently in judging pyknics.—G. Brighouse (Occidental).

183. Feng, T. P. Studies on the neuromuscular junction. X. The effects of guanidine. *Chin. J. Physiol.*, 1938, 13, 119-140.—Guanidine is shown to have a powerful specific action on the neuromuscular junction, resulting in characteristic modifications of the response of the muscle to indirect stimulation. In a guanidine-treated toad's nerve-sartorius preparation, a single shock applied to the nerve calls forth a brief tetanus followed by rhythmic twitches which may be sustained for 1-2 mins., while a single stimulus on the nerve-free portion of the muscle elicits an usual twitch. The sustained twitches also follow a short period of tetanization. They are very promptly and effectively suppressed by excess calcium or potassium and also by a sufficient large dose of curare. The development of junctional inhibition during indirect tetanic stimulation at high frequencies is at first promoted by guanidine and then prevented by it at a more advanced stage of its action. The neuromuscular block resulting from such diverse agencies as curare, atropine, eserine, sodium, and fatigue can all be promptly removed by guanidine.—C. F. Wu (Academia Sinica).

184. Feng, T. P. Studies on the neuromuscular junction. XIII. The localized electrical negativity of muscle around N-M junction due to high-frequency nerve stimulation. *Chin. J. Physiol.*, 1939, 14, 209-224.—An electrical method of recording (superior to the previous one of double myograph and double thermopile) has been successfully applied not only to the amphibian sartorius but also to the toad gastrocnemius and the cat soleus. During high frequency nerve stimulation and accompanying the development of Wedensky inhibition at the N-M junctions, there has been shown a localized electrical negativity in the innervated portion of the muscle corresponding to the

localized contraction previously demonstrated. A condition of persisting negativity in muscle following a tetanic contraction is shown, the magnitude of this after-negativity increasing with the size of the preceding contraction.—C. F. Wu (Academia Sinica).

185. Feng, T. P., Lee, L. Y., Meng, C. W., & Wang, S. C. Studies on the neuromuscular junction. IX. The after effects of tetanization on N-M transmission in the cat. *Chin. J. Physiol.*, 1938, 13, 79-108.—With the normal cat's soleus muscle *in situ*, it is demonstrated that a period of high frequency in direct tetanization has 3 after effects: (1) augmentation of twitches in response to maximal nerve shocks, (2) reduction of Wedensky inhibition during a short period of high frequency stimulus, and (3) production of spontaneous twitchings. The appearance of all these effects in a striking form requires in the first place that the tetanization is at high frequency and then that its duration is sufficiently long. The post-tetanic spontaneous twitchings are suppressed by curare and magnified by eserine. It is argued with certain evidences that a release of potassium at the N-M junction by the bombardment of high frequency impulses would account for all the post-tetanic effects.—C. F. Wu (Academia Sinica).

186. Feng, T. P., & Li, T. H. Studies on the neuromuscular junction. XVI. Acetylcholine sensitivity of a muscle and its aptitude to give contracture of the eserine type. *Chin. J. Physiol.*, 1940, 15, 197-212.—Experimental observations show that the natural differences of the various muscles of the same or different animals to give contracture of the eserine type and the varying conspicuousness of the contracture by the same muscle under different conditions are correlated with corresponding differences in their sensitivity to the contracture-producing action of AC, thus strengthening the idea that this type of contracture is in reality AC-contracture. The previous interpretation, however, has been revised in so far as the acquirement of a heightened AC sensitivity by the muscle, rather than the inactivation of cholinesterase or the continued liberation of AC at the end of stimulation, is now emphasized as the chief and probably by itself the sufficient condition for the development of the contracture, the chief action of substances like eserine and barium being to endow the muscle with this sensitivity.—C. F. Wu (Academia Sinica).

187. Feng, T. P., & Ting, Y. C. Studies on the neuromuscular junction. XI. A note on the local concentration of cholinesterase at motor nerve endings. *Chin. J. Physiol.*, 1938, 13, 141-144.—The present observations on the toad's sartorius confirm the finding of Marnay and Nachmansohn that the local concentration of cholinesterase at the motor nerve endings may be some 10,000 times that in the bulk of the muscle and show that the esterase activity of the innervated portion of the muscle persists with only a small diminution up to 34 days after denervation. Thus, the mechanism required

by the chemical theory of skeletal neuromuscular transmission for the rapid destruction of AC at the N-M junction does in fact exist.—C. F. Wu (Academia Sinica).

188. Freeman, G. L. Muscular action potentials and the time-error function in lifted weight judgments. *Psychol. Bull.*, 1940, 37, 569.—Abstract.

189. Haggard, E. A. An experimental and correlational analysis of factors in motor steadiness. *Psychol. Bull.*, 1940, 37, 576.—Abstract.

190. Helmick, J., & Starman, R. Group factors in speed of simple and discriminative reactions. *Psychol. Bull.*, 1940, 37, 576.—Abstract.

191. Hovland, C. I., & Riesen, A. H. Magnitude of galvanic and vasomotor response as a function of stimulus intensity. *J. gen. Psychol.*, 1940, 23, 103-121.—Simultaneous photographic recordings were made of the galvanic skin reaction (Tarchanoff method) and vasomotor response to electric shock of graded intensities. Amount of vasoconstriction was linearly related to the 4 intensities of shock (average of 8 subjects), as was the size of the galvanic response. Pearson *r*'s between extent of vasoconstriction and amplitude of galvanic reaction for each subject ranged from .32-.71. Galvanic reactions to a 1000 cycle tone at threshold and at 30, 60, 90, and 120 db. above thresholds were recorded for 20 subjects. The logarithm of the response increased in an approximately linear relation to db. above threshold. A non-linear function was obtained when amplitude of response was plotted against summated just perceptible increments of intensity. The relation between loudness and intensity, found by other workers, is similar to that here found between amplitude of the galvanic skin response and intensity. 38 references.—C. N. Cofer (U. S. Employment Service).

192. Hsiao, C. H. [An experimental study of the influence of noise upon work.] *Educ. Rev. (Chinese)*, 1937, 27, No. 5, 99-102.—35 grade IV pupils were required to work for 10 mins. on the same 100 arithmetic operations, multiplication of a two-place number by a digit-place number, first under a noisy and then (after 8 days) under a quiet environment, the instructions being the same. The results showed that the noise had a detrimental effect on work, in respect to (1) total number of multiplications, (2) percentage of wrong answers, and (3) number of multiplications correctly worked. Thus, the noise has caused a decrease of speed by 5.6%, an increase of wrong answers by 26.6%, and a decrease of efficiency by 8.4%.—C. F. Wu (Academia Sinica).

193. Hsieh, W. M. A vagus-post-pituitary reflex. II. The glycogenic effect. *Chin. J. Physiol.*, 1938, 13, 187-196.—Faradic stimulation of the afferent vagus or the peripheral cervical sympathetic in normal adult cats under chloralose causes a transient moderate increase of the blood sugar concentration up to 40 mg per cent. The hyperglycaemia is obtainable after crushing of the neuraxis (neck), but not after hypophysectomy. The mechanism of the hyperglycaemia has been dis-

cussed. It is suggested that vagal hyperglycaemia is mediated by the posterior lobe, whereas that of the sympathetic probably involves the anterior lobe of the pituitary gland.—*C. F. Wu* (Academia Sinica).

194. Hyman, L. H. *The invertebrates: Protozoa through Ctenophora*. New York: McGraw-Hill, 1940. Pp. 726. \$7.00.—Reference to behavior is included in this treatise with all the other aspects of the organisms dealt with.—*F. A. Mote, Jr.* (Connecticut).

195. Irwin, J. M. Some crucial aspects of the problem of sex differences. *Psychol. Bull.*, 1940, 37, 591.—Abstract.

196. Johnson, H. M. Some studies of experimentally induced impairment, showing how the results of any experiment depend on the investigator's pre-experimental assumptions and his use of the deductive method. *Psychol. Bull.*, 1940, 37, 554.—Abstract.

197. Kirkman, F. B. Field experiments on drives in birds. *Character & Pers.*, 1940, 9, 51-66.—This study is concerned with the so-called territorial drive of the blackheaded gull. It is the drive to take and maintain exclusive possession of an area of ground, water, or air. Whether the area shall be narrower or broader depends upon whether the intruder is a passer-by, collecting nest materials and sucking exposed eggs, or a nesting neighbor. Aggressiveness with respect to this drive is a function of whether a given bird is an intruder or an owner. When the intruder has moved its nest closer to that of an owner, the owner becomes more aggressive in defending its property while the intruder becomes more timid, hesitant, and regressive. But on reversing the relation, the same bird which was previously the owner and more aggressive now, as intruder, becomes the hesitant one while the other bird becomes the bold defender. Both male and female play the role of incubator, and there are no apparent sex differences in the owner-intruder relationship. A large sturdy male intruder may be relatively cowed in the presence of an aged and much smaller female owner. The implications of the study are discussed in view of McDougall's instinct of pugnacity.—*M. O. Wilson* (Oklahoma).

198. Lack, D. The behavior of the robin. *Proc. zool. Soc. Lond.*, 1939, Ser. A., 109, 169-219.—(*Biol. Abstr.* XIII: 18070).

199. Lawton, G. A long-range research program in the psychology of old age and aging. *J. soc. Psychol.*, 1940, 12, 101-114.—Suggestions are made for research into changes in mental abilities, social adjustments and attitudes, and emotional reactions in the aged.—*G. Brighouse* (Occidental).

200. Loken, R. D. The influence of metrazol upon maze behavior. *Psychol. Bull.*, 1940, 37, 592.—Abstract.

201. Majorov, T. P. [Studies in the dynamics of sleep and of transitory states in man by the chronaximetric method.] *Ark. biol. Nauk*, 1939, 34, 165-173.—[Abstracted review; original not

seen.] An increase of the chronaxy of certain muscles was found with increase in the depth of sleep. Day, night, narcotic, and hypnotic sleep were investigated. For night sleep the author found a maximum in the evening and morning, the 2 maxima representing 50% of the total duration. During day sleep the maximum represents only 16-35% of the time. In hypnotic sleep the chronaxy change is much less than in normal sleep; in narcotic sleep no change in chronaxy was observed.—*H. L. Ansbacher* (Brown).

202. McCloy, C. H. The measurement of speed in motor performance. *Psychometrika*, 1940, 5, 173-182.—When the centroid method of factor analysis was applied to two sets of data on athletic performances, three significant factors emerged: strength, velocity, and dead weight. Scores on this speed factor were predicted by the multiple regression technique, the factor loadings on the speed factor being used as the criterion correlations, and these predicted scores were correlated with each of the other variables. When the original tables, augmented by the new speed variable, were refactored, the computed speed factor fell on the speed axis as a primary trait. It is thus shown that it is possible to isolate and measure a factor which appears in variables under consideration only as a compound.—(Courtesy *Psychometrika*).

203. Michon, P. *Le temps de réaction. Techniques. Applications cliniques.* (Reaction time. Techniques. Clinical applications.) Paris: Masson, 1939. Pp. 99. Fr. 22.—[Abstracted review; original not seen.] This monograph gives the history of reaction time studies and the values found for various sense modalities and age levels. Increase in reaction time in several diseases such as neurosyphilis, parkinsonism, and alcoholism is discussed. In spite of the great variability of the values, reaction time gives some indication of mental age level and vocational aptitude.—*H. L. Ansbacher* (Brown).

204. Morsh, J. E. Preliminary studies of emotional behavior. *Psychol. Bull.*, 1940, 37, 593.—Abstract.

205. Munk, F. *Über die Verteilung der elektromotorischen Spannungsunterschiede der menschlichen Haut und ihre Beziehung zum vegetativen System.* (The distribution of the electro-motoric potential differentials in the human skin and its relation to the vegetative system.) *Wien klin. Wschr.*, 1939, 52, Part I, 525-530.—[Abstracted review; original not seen.] The potentials are considered a separate function of the skin, independent of events in the peripheral nervous system. The existence of a certain balance of electro-motoric force on the skin surface is shown and a relationship with the events in the vegetative nervous system is assumed.—*H. L. Ansbacher* (Brown).

206. Newman, H. H. *Multiple human births: twins, triplets, quadruplets and quintuplets.* New York: Doubleday, Doran, 1940. Pp. xii + 214. \$2.50.—This is a survey for the general reader of the present status of the biology and psychology of twins

and super-twins. It contains a brief statement of the methods of diagnosing one-egg twins as well as discussions of the role of heredity in determining intelligence and behavior. Bibliography.—W. S. Hunter (Brown).

207. O'Kelly, L. I. The validity of defecation as a measure of emotionality in the rat. *J. gen. Psychol.*, 1940, 23, 75-87.—85 rats were divided by the split-litter technique into 4 groups such that the groups were approximately equal in the speed of locomotion manifested by the animals in a relatively free situation just prior to weaning (measurements made over a 10-day period). Measurements of defecation during periods in an enclosed circular field were made, and a water maze was used as a learning test. The defecation tests were made for group 1 just after weaning, and for groups 2, 3, and 4 two, four, and six weeks after weaning. Group 1 showed the greatest amount of defecation. Defecating and non-defecating rats showed no statistically significant differences on the speed of locomotion test or on the several learning measures, except for time scores; the defecating animals made lower time scores on the maze than the others. If defecation is a measure of emotionality, differences should have appeared between the defecating and non-defecating animals on these tests. It is concluded, then, that, in the situations described, defecation is not a valid indicator of emotion.—C. N. Cofer (U. S. Employment Service).

208. Osborn, F. Preface to eugenics. New York: Harper, 1940. Pp. 312. \$2.75.—The eugenics movement of today is based on scientific fact gathered from the sciences of man. Biology contributes information as to the genetic basis and mechanics of transmission of traits, chiefly physical. Anthropology reveals the interdependence of personality and culture. Psychology discloses fundamentals in the development of mental traits, intelligence, and personality. From its carefully controlled researches comes a better understanding of what underlies individual differences in psychological characteristics, both throughout the normal range and at the extremes of the distribution curve. From studies in child development and adolescence, eugenics can gather enlightenment as to the desirable home, school, and community influences which should envelop the nation's children if a eugenics program is to make headway. From sociology, comes knowledge on national birth and death rates, differential fertility for various groups within the whole population. Studies in the economics of the wherewithal for living—nutrition, housing, medical care, and recreation—supply the more radical ideas now motivating the eugenics movement. From a synthesis of the wisdom accruing from all the human sciences emerges a eugenics philosophy which shapes up the eugenics ideal of respect for the value of the individual, an ideal which is inherent in Christianity and democracy, and which today is actively furthered by progressive education.—G. C. Schwesinger (American Museum of Natural History).

209. Powers, E. B. The spawning migration of the salmon. *Science*, 1940, 92, 353-354.—The author reviews the evidence supporting the hypothesis that one of the important factors influencing salmon migration is the carbon dioxide tension of their water. At the time of sexual maturity the salmon follow the carbon dioxide tension gradient established by the mixing of fresh water and sea water and pass from the mixed sea water and fresh water into the fresh water streams. After arriving at the mouth of the stream they respond to the current and ascend the stream.—F. A. Mote, Jr. (Connecticut).

210. Rife, D. C. Handedness, with special reference to twins. *Genetics*, 1940, 25, 178-186.—Data were obtained for 687 families on handedness, and on parent-child correlations of left-handedness. Of 3,542 persons, 263, or 7.45% were left-handed. Several pairs of genetic factors, based on a study of handedness of 223 monozygotic and 146 dizygotic pairs of twins, were held accountable, at least in part. Left-handed parents are more likely to have left- than right-handed offspring. Twins of either class are more likely to be left- than right-handed, probably owing to conditions *in utero*.—G. C. Schwesinger (American Museum of Natural History).

211. Rigg, M. G. The effect of register and tonality upon musical mood. *J. Musicol.*, 1940, 2, No. 2, 49-61.—84 college students judged the emotional effects elicited from 5 musical phrases, each in five different registers. Shifts of an octave upward increased the happiness. Shifts upward to the dominant usually but not always made for increased happiness. Shifts upward or downward by a half-step did not elicit consistent results. No evidence was found for the theory that each key possesses a distinctive character.—P. R. Farnsworth (Stanford).

212. Romanova-Bokhon, O. A. [Pupillary reactions after sympathetic denervation.] *Vestn. Oftal.*, 1940, 16, 108 ff.—[Abstracted review; original not seen.] Laboratory investigation with rabbits on the effect of adrenalin and cocaine on the iris after extirpation of the cervical sympathetic indicates that adrenalin acts on the iris through the myoneural sheath or the contractile tissue of the muscle fibers, whereas cocaine acts on the terminal sympathetic endings in the iris.—D. J. Shaad (Lawrence, Kansas).

213. Schulz, B. Über Auslesemöglichkeiten beim Sammeln von Zwillingsserien. (The possibilities of selection in the collection of twin series.) *Allg. Z. Psychiat.*, 1939, 112, 138-147.—[Abstracted review; original not seen.] A selective factor may be introduced by the fact that twins of probationers are more likely to be made probationers themselves than would normally be the case. But only theoretical importance is attributed to this possibility.—H. L. Ansbacher (Brown).

214. Sharp, L. H. Effects of residual tension on output and energy cost in a second period of ergographic work. *Psychol. Bull.*, 1940, 37, 569.—Abstract.

215. Thorne, F. C. Approach and withdrawal behavior in dogs. *J. genet. Psychol.*, 1940, 56, 265-272.—Each day for 30 days the experimenter subjected 178 dogs to a 3-part test of friendliness by (1) offering food to the animals through the wire fences of their 50-foot runways, (2) squatting in the runway entrances while offering food, (3) standing in the runways, simultaneously offering food and trying to pat the dogs' heads. The distance between experimenter and dog at the point of closest approach was measured. By the end of the experiment the percentage of dogs eating from the experimenter's hand in part 1 had increased from 77 to 85, in part 2 from 64 to 79 and the percentage submitting to patting (part 3) from 40 to 56. This training did not influence the animals' responses to persons other than the experimenter, and efforts to induce friendliness by forcing submission to patting succeeded with only 20 of 54 animals.—D. K. Spelt (Mississippi).
216. Waldrop, R. S. A factorial study of the components of body-build. *Psychol. Bull.*, 1940, 37, 578.—Abstract.
217. Watters, T. A. Emotional factors in disease. *N. Orleans med. surg. J.*, 1939, 92, 118-125.—(*Child Develop. Abstr.* XIV: 1168).
218. Wenger, M. A. A study of individual differences in electrical resistance. *Psychol. Bull.*, 1940, 37, 576.—Abstract.
219. Wiley, L. Some factors of pleasantness in visual design. *Psychol. Bull.*, 1940, 37, 568.—Abstract.
220. Wojtusiak, R. J., & Ferens, B. Untersuchungen über die Orientation und Geschwindigkeit des Fluges bei Vögeln. IV. Heimkehrgeschwindigkeit und Orientierungsart bei den Rauchschnäbeln. (*Hirundo rustica* L.) (Bird orientation and speed of flight. IV. Homing speed and manner of orientation in the chimney swallow, *Hirundo rustica* L.) *Bull. int. Acad. Cracovie*, 1938, 2, 4/7, 173-201.—[Abstracted review; original not seen.] The homing speed is greater the longer the distance. This may possibly be the result of a feeling of disquietude in less known regions.—H. L. Ansbacher (Brown).
221. Yi, C. L. The nature of sensory end-organs associated with pressure fibres. *Chin. J. Physiol.*, 1939, 14, 439-448.—In vagotomized adult cats under urethane or ether and curare, electrical stimulation of the skin or of the parietal peritoneum, mechanical stretching of the skeletal muscle, and distention of the bladder or rectum all give rise to a pressor response which is not affected by adrenalectomy or decerebration. While decapitation diminishes the response, strychnine can augment it. Destruction of the spinal cord down to the level of the 4th lumbar segment, sympathectomy, and administration of nicotine abolish it entirely. A similar response can also be induced in decorticate cats by auditory, olfactory, and gustatory stimuli. It can also be extinguished by nicotine administration. It is concluded that afferent impulses from practically all sensory end-organs may reach the medullary and spinal sympathetic centres and produce a pressor response. The existence of a specific pressor fibre remains to be proved.—C. F. Wu (Academia Sinica).
222. Zanzucchi, G. Sulle variazioni della pupilla che si osservano durante la rotazione. (On the changes of the pupil during rotation.) *Ateneo parmense*, 1939, 11, 53-54.—[Abstracted review; original not seen.] During rotation contraction of the pupil can be observed, after rotation, dilation, which gradually changes to spasmodic alteration.—H. L. Ansbacher (Brown).
223. Zanzucchi, G. Sulle variazioni della pupilla che si osservano durante la rotazione. (On the changes of the pupil observed during rotation.) *Boll. Soc. ital. Biol. sper.*, 1939, 14, 237-238.—[Abstracted review; original not seen.] Pigeons being rotated at the rate of $\frac{1}{2}$ rotation per second show contraction of the pupil after the 2nd or 3rd rotation.—H. L. Ansbacher (Brown).
224. Zonta, G. I disturbi della motoricità oculare nella encefalite epidemica cronica. (Disturbances of ocular motility in chronic epidemic encephalitis.) *Riv. sper. Freniat.*, 1939, 63, 374-392.—Zonta's study is based on 41 cases, 24 of which had post-encephalitic psychoses with the parkinsonian syndrome. He believes that ocular disturbances are equally frequent in all types of the disease. The palpebral alterations include hyperkinesia, blepharospasm, and uni- or bilateral ptosis. Isolated paralyses of the external muscles are exceptional. Nystagmus of various forms occurs without vestibular lesions; also oculogyric crises, accompanied in their final phases by anisocoria and ocular pains. Pupillary reflexes are usually slow and of small amplitude.—M. E. Morse (Baltimore).
225. Zündorf, W. Der Lamarckismus in der heutigen Biologie. (Lamarckism in present-day biology.) *Arch. Rass.-u. Gesbiol.*, 1939, 33, 281-303.—[Abstracted review; original not seen.] The more important recent investigations on the heredity of acquired characteristics are discussed and criticized, among them the work of McDougall, Agar, Drummond, Tiegs, etc. The author refutes the Lamarckistic theories. "To date the only factors recognized as important in phylogeny are mutation and selection."—H. L. Ansbacher (Brown).

[See also abstracts 49, 52, 55, 62, 63, 73, 84, 148, 235, 236, 248, 316, 397, 406, 434, 436, 437, 517.]

PSYCHOANALYSIS, DREAMS, HYPNOSIS

226. Britt, S. H. Possible explanations of two "inexplicable" ESP experiments. *Psychol. Bull.*, 1940, 37, 629-630.—The author proposes explanations of the Warner and Riess ESP experiments which Kennedy (see XIII: 3094) considered "as yet inexplicable." In addition to the possible sources of error noted by Kennedy, the author points out that Warner's report was based on only 250 trials, or 10 runs through the deck. In the case of Riess's study, the author maintains that the report should be struck from the list of studies showing

evidence for ESP, because the subject of the experiment cannot be located and this fact precludes independent check experiments.—*A. W. Mellon* (Missouri).

227. Bugelski, R., & Bugelski, S. A further attempt to test the role of chance in ESP experiments. *J. Parapsychol.*, 1940, 4, 142-148.—This experiment repeats Leuba's, in which the matchings between one randomly-shuffled pack of ESP cards and another are examined to determine the effects of pure chance, but it adds the controls of mechanical shuffling and double-checking of data. It confirms Leuba's finding: chance could account for subjects who make relatively high scores over a period of time.—*D. W. Chapman* (Bennington).

228. Carington, W. W. Experiments on the paranormal cognition of drawings. *J. Parapsychol.*, 1940, 4, 1-125.—A report on 5 experiments on the cognition of distant drawings. In each of these, 10 different originals were exposed in a sealed room, the drawings having been selected by a random method. About 250 percipients took part, producing about 2,200 drawings. The drawings were matched against the whole 50 originals by a judge having no knowledge of the experimental conditions. He judged a total of 1,209 drawings to be sufficiently like the originals to be worthy of mention. The excess of this number over that to be expected by chance is such as could be achieved by chance in about one in 30,000 such experiments. There are disparities in time between the exposure of the originals and the percipients' productions. Percipients' drawings are more like reproductions of an idea conveyed by the original drawing than like copies of the drawing.—*D. W. Chapman* (Bennington).

229. Carington, W. W. Some observations on the experiments with drawings. *J. Parapsychol.*, 1940, 4, 130-134.—Remarks on the disadvantages and advantages of the method used in the author's simultaneously reported experiments on the cognition of drawings (see XV: 228).—*D. W. Chapman* (Bennington).

230. Carrington, H. Psychology in the light of psychic phenomena. Philadelphia: McKay, 1940. Pp. 214. \$2.00.—Chapter 1 deals with the usual functions described in psychology in the light of the assumption that there is a mind independent of the body and which accounts for telepathic and clairvoyant phenomena. The manifestations usually regarded as hysterical are discussed as evidence of this hypothesis. Chapter 2 reports séances and correspondence with a medium. Chapter 3 discusses the acquisition of supernormal knowledge and reports illustrative cases.—*D. W. Chapman* (Bennington).

231. Hanks, L. M., Jr. An explanation of the content of dreams through an interpretation of dreams of convicts. *J. gen. Psychol.*, 1940, 23, 31-46.—52 dreams related by convicts were classified into 34 groups. 27 of the dreams bore a direct relation to the waking thought and feeling content of the dreamers. 15 other dreams were considered to

bear this relationship on the basis of assumptions made about the dreamers' experiences. 10 dreams were not readily interpretable. Examples are presented. 3 hypotheses are suggested: (1) Hallucinatory material is produced during sleep. (2) Reported dreams are a part of such material. (3) What is reported depends on the relation of the hallucinatory material to the waking thought and feeling content of the dreamer. Supportive evidence is indicated.—*C. N. Cofer* (U. S. Employment Service).

232. Hoffman, B. ESP and the inverse square law. *J. Parapsychol.*, 1940, 4, 149-152.—It has been remarked that if the long-distance results in ESP are reliable, they would imply that the energy of communication should not diminish with distance according to the inverse-square law governing other radiations. But this is not a necessary conclusion if it be assumed (1) that intensity, but not intelligibility, of ESP diminishes with distance, or (2) that the percipient can subjectively amplify the intensity of received signals. What law in fact governs ESP radiation could only be determined if objective, as well as the present subjective, measures of its intensity were available.—*D. W. Chapman* (Bennington).

233. Mayer, L. *Die Technik der Hypnose*. (The technique of hypnosis.) (2nd ed.) Munich, Berlin: Lehmann, 1938. Pp. 194. RM. 6.50.—[Abstracted review; original not seen.] An introduction to the subject is given in this book. Mayer's concept of hypnosis is strongly influenced by psychoanalysis; hence his technique stresses less the direct suggestive command than the logical destruction of complexes through hypnotic suggestions. With appropriate technique, motor expressions (including speech and writing) corresponding to the subject's true character can be evoked and utilized for diagnosis. The close linking of hypnosis with general psychotherapy distinguishes this work from others on the subject. The complementary use of the two methods gives surprisingly successful results.—*M. E. Morse* (Baltimore).

234. Stuart, C. E. An examination of Kennedy's study of the MacFarland data. *J. Parapsychol.*, 1940, 4, 135-141.—An elaboration of Kennedy's study of MacFarland's call-series discrepancies is offered. The recording errors indicated are of two kinds—simple observational errors and motivationally directed errors. The former are random and do not invalidate the work; the magnitude of the latter is too small to affect the direction of the results.—*D. W. Chapman* (Bennington).

235. Vallance, T. R. Suggestibility of smokers and non-smokers. *Psychol. Rec.*, 1940, 4, 138-144.—47 male students (ages 17-24) of whom 25 were smokers and 22 were non-smokers served as subjects. The Hull Postural Movement Recorder measured the degree of sway following suggestive directions. Smokers were somewhat less positively suggestible than non-smokers.—*P. S. de Q. Cabot* (Simmons).

236. White, M. M. Blood pressure and palmar galvanic changes in normal and hypnotic states. *Psychol. Bull.*, 1940, 37, 577.—Abstract.

[See also abstracts 87, 425.]

FUNCTIONAL DISORDERS

237. Bainbridge, W. S. Somatic factors in mental and nerve conditions. *Med. Rec.*, N. Y., 1940, 152, 245-249.—Seriously unfortunate psychological reactions to physical defects or ailments may culminate in mental ailments. Hence there should be recourse to every medical and surgical procedure to correct physical deviations as a measure of curing mental disturbances and reducing their incidence. 12 illustrative case histories are cited.—M. H. Erickson (Eloise Hospital).

238. Bergler, E. Some recurrent misconceptions concerning impotence. *Psychoanal. Rev.*, 1940, 27, 450-466.—Only 3 organic diseases can cause impotence: tabes, multiple sclerosis, and diabetes. All other cases should be treated with hormone injections which may cure by suggestion. If this method fails, Freudian psychoanalysis should be resorted to.—G. Brighouse (Occidental).

239. Berl, E. G. Normality: an historical and comparative analysis of the concept. *J. exp. Educ.*, 1940, 9, 91-94.—This analysis of the literature stresses underlying connections, trends, and principles.—H. W. Karn (Pittsburgh).

240. Boehm, F. Poliklinische Erfahrungen. (Polyclinic experiences.) *Zbl. Psychother.*, 1940, 12, 65-87.—Boehm discusses the influence of the patient's economic condition on the manifestations of his neurosis and opportunities for treatment and improvement. In the poor, neuroses are not only felt more keenly than in the rich, but are more complicated. The author outlines the problems arising from prolonged treatment of neurotics of small means in a polyclinic, the administration and policies of an institution receiving both the rich and the poor, personality qualifications for the staff, etc.—M. E. Morse (Baltimore).

241. Brambilla, S. Contributo allo studio delle manifestazioni psicopatologiche delle popolazioni dell' Impero. I.—II "Cherbé" o "malattia dei diavoli." (Contribution to the study of the psychopathological phenomena of the population of the empire [Ethiopia]. I.—"Cherbé" or "devils' disease.") *Riv. Patol. nerv. ment.*, 1939, 53, 187-206.—[Abstracted review; original not seen.] This is a kind of hysteria in which the patient believes himself possessed by devils from whom he wants to free himself. The disease which sometimes takes the form of an epidemic, is of interest for the study of primitive thought. It has certain characteristics of schizophrenia, and may be interpreted as an expression of the archaic-primitive form of thinking found in that psychosis.—H. L. Ansbacher (Brown).

242. Brüel, O. Der praktische Arzt und die Psychotherapie. (The general practitioner and psychotherapy.) *Fortschr. Med.*, 1938, 56, nos. 1 & 2.

—[Abstracted review; original not seen.] An appeal to practitioners to regard minor psychotherapy as indispensable in their education as is minor surgery. The general practitioner holds a key position here, and he should also be well grounded in the principles of major psychotherapy in order to keep ahead of his educated patients.—M. E. Morse (Baltimore).

243. Budde, O. Psychologie, Psychopathologie und Psychotherapie. (Psychology, psychopathology, and psychotherapy.) *Mschr. Kinderheilk.*, 1939, 79, 131-145.—[Abstracted review; original not seen.] A short review of the German and foreign literature of the previous year in the field.—H. L. Ansbacher (Brown).

244. Cargnello, D. [A synthetic scheme of psychological organization of neuroses according to Adler.] *Rass. Studi Psichiat.*, 1940, March-June, 291 ff.

245. Case, H. W. Therapeutic methods in stuttering and stammering. *Psychol. Bull.*, 1940, 37, 586.—Abstract.

246. Coon, G. P., & Raymond, A. F. A review of psychoneuroses at Stockbridge. Stockbridge, Mass.: Austen Riggs Foundation, 1940. Pp. xii + 299. \$2.00.—This book, made possible by a grant from the John and Mary R. Markle Foundation, constitutes a review of the clinical work of Austin Fox Riggs and his associates during the past 25 years at Stockbridge, Massachusetts. Part I, 75 pages, delimits the concept of psychoneurosis, describes the methodology of treatment and certain beneficial aspects of therapy, and presents briefly 92 formulations of representative individual case histories. Part II, 82 pages, deals with a statistical analysis of 1,060 selected cases in relation to various data obtained from case histories and from questionnaires sent to the patients. Part III, 9 pages, constitutes a general summary of the book. The remaining 124 pages contain 6 appendices, particularly the special therapeutic lectures and re-educational discussions given to the patients, Riggs' bibliography, methods of coding and tabulating data, and examples of the questionnaire and letters employed. The book is not indexed.—M. H. Erickson (Eloise Hospital).

247. Crutcher, H. B. Family care of mental defectives. *Amer. J. ment. Def.*, 1940, 45, 127-133.—Family care in rural homes of certain types of mental defectives is advocated. 3 New York State institutions have been using this system for the past 6 years and have placed over 300 patients. It has important values for both patient and caretaker, and represents a saving to the State of \$5.00 per week and patient.—M. W. Kuensel (Children's Home, Cincinnati).

248. Cutler, M., Little, J. W., & Strauss, A. A. The effect of benzedrine on mentally deficient children. *Amer. J. ment. Def.*, 1940, 45, 59-65.—Medication by small doses did not show much, if any, effect on mental test achievement of mental retardates under controlled experimentation, nor were there noticeable changes in the behavior of

these subjects. However, the drug when given as a sudden stimulation favored the outcome of tests involving psychomotor activities and of tests effecting the utilization of learned materials in the academic field.—*M. W. Kuensel* (Children's Home, Cincinnati).

249. Doll, E. A. Psychological personnel. *Amer. J. ment. Def.*, 1940, 45, 167-169.—This report discusses professional personnel standards and professional activities of psychologists in institutions for mental defectives. Activities include clinical and psychometric service, research, and education. Psychologists in institutions should have at least a Bachelor's and preferably a Master's, or Ph.D. degree with a major in clinical psychology. Each should have a sound background of experience and should be actively affiliated with professional organizations in the field. The conclusion is reached that in a population of 500 patients there might well be 3 full-time psychologists assigned to case-work, collaboration in treatment and training, and research.—*M. W. Kuensel* (Children's Home, Cincinnati).

250. Dunlap, K. Antidotes for superstitions concerning human heredity. *Psychol. Bull.*, 1940, 37, 547.—Abstract.

251. Edwards, E. Observations on the use and efficacy of changing a patient's concept of his role—a psychotherapeutic device. *Psychol. Bull.*, 1940, 37, 576.—Abstract.

252. Essen-Möller, E. Krigspsykiatri. (War psychiatry.) *Svenska läkartidn.*, 1940, 37, 1217-1247.—This is a general treatise on the work of psychiatry in war times, with subheadings of: general frequency and causation conditions, mass psychological factors, symptomology of various mental diseases under war conditions, disposition and reaction mechanisms, the concept of hysteria and simulation, abnormal reactions of a more disciplinary type, desertion, obstruction, explosiveness, sexual problems, concluding with a brief chapter on therapy and prophylaxis. Bibliography.—*M. L. Reymer* (Mooseheart Laboratory for Child Research).

253. Font, M. M. The 1937 Stanford-Binet scale as a technique in the diagnosis of schizophrenia. *Psychol. Bull.*, 1940, 37, 547.—Abstract.

254. Frankel, E. The development of the program for the mentally deficient in New Jersey—a statistical review. *Amer. J. ment. Def.*, 1940, 45, 110-118.—"The volume and nature of the flow of the mentally deficient through the specialized institutions established for their care in New Jersey is the essential concern of this study. It covers a 52-year span, from the beginning of the establishment of special institutions for the mentally deficient in New Jersey in 1888 to 1940. During that period more than 8,000 individuals have sought the care of the developing institutions. It is their changing characteristics in regard to mental level, sex, color, age, etc. that have been analyzed. Beyond that an analysis has been made of the rate of discharge from

institutional care." There is an accelerated rate in the return of individuals from institutions back into the community. This can be ascribed to improvements in the training programs of institutions, extension of community supervision for those released on extended visits or on parole, and a more thorough understanding by the public regarding the part played by state institutions, the local public schools, and social agencies in the care and training of defectives.—*M. W. Kuensel* (Children's Home, Cincinnati).

255. Freeman, W. "Nervousness" as a presenting symptom. *Dis. nerv. Syst.*, 1940, 1, 91-94.

256. Funk, A. [Problems of combined biopsychotherapy in the sexual sphere.] *Neopsychiatrica*, 1939, 5, 435-449.

257. Gilbert, R. The public health nurse and her patient. New York: Commonwealth Fund, 1940. Pp. viii + 396. \$2.25.—(*Educ. Abstr.* V: 1016).

258. Glassbury, J. A. Disorders of speech. *Med. Rec., N. Y.*, 1940, 152, 253-257.—The author gives a general discussion of the development of speech, its mechanisms, aphasia, mental mutism, the speech of the mental defective, lisping, and nasal, cleft palate, and post-adenoidal speech. He classifies speech disorders into 2 types, those of defective phonation and of stuttering or stammering. Defective phonation he considers to arise from both central and peripheral causes, while stammering is a spastic coordination neurosis based on a mental conflict. Treatment of disorders of speech must be in accord with the medical, surgical, mental, and educational needs of the individual.—*M. H. Erickson* (Eloise Hospital).

259. Grelinger, H. [Foundations for the organization of the psychiatric service at the front.] *Milit. geneesk. Tijdschr.*, 1939, 28, 90-105.—[Abstracted review; original not seen.] Neurotics should be treated near the front and be sent back to the lines as soon as possible. Only those cases which cannot be cured within a week should be treated farther behind the lines.—*H. L. Ansbacher* (Brown).

260. Hajdu-Gimes, L. Contributions to the etiology of schizophrenia. *Psychoanal. Rev.*, 1940, 27, 421-438.—Schizophrenia is based on an oral fixation resulting from starvation in infancy due to insufficient lactation or carelessness of the mother. The infant fails to gain gratification for a need, escapes into hallucinatory satisfaction, becomes conditioned to escape in this manner whenever discomfort arises, and the schizophrenic personality is founded. Melancholia also may be a result of oral fixation.—*G. Brighouse* (Occidental).

261. Hall, J. K. The language-barrier in depressed states. *Dis. nerv. Syst.*, 1940, 1, 133-135.

262. Hamilton, J. R. Epileptiform convulsions in rats. *Psychol. Bull.*, 1940, 37, 590.—Abstract.

263. Harriman, P. L. Greek derivatives in the technical vocabulary of speech pathology. *Quart. J. Speech*, 1940, 26, 201-206.—A classified list of the

technical terms in common use to describe disorders of speech, "developed after extensive study of dictionaries, manuals of psychiatry, texts on psychology, and books dealing with speech pathology."—*W. H. Wilke* (New York University).

264. Himwich, H. E., Fazekas, J. F., & Nesin, S. Brain metabolism in Mongolian idiocy and phenyl pyruvic oligophrenia. *Amer. J. ment. Def.*, 1940, 45, 37-41.—In 65 mongoloids and 15 individuals with phenyl pyruvic oligophrenia a significant diminution of cerebral metabolism was noted. This diminution was evidenced by a decreased cerebral oxygen uptake and confirmed by a lessened utilization of blood sugar by the brain. The authors suggest that the lowered cerebral metabolism bears a causal relationship to the development of these 2 forms of idiocy.—*M. W. Kuensel* (Children's Home, Cincinnati).

265. Hohman, L. Some facts that the internist should know about depressions. *Dis. nerv. Syst.*, 1940, 1, 7-10.

266. Hunt, T. The application of the Rorschach test and a word-association test to patients undergoing prefrontal lobotomy. *Psychol. Bull.*, 1940, 37, 546.—Abstract.

267. Jacob, J. S. The prediction of the outcome-on-furlough of dementia praecox patients. *Genet. Psychol. Monogr.*, 1940, 22, No. 3, 425-453.—319 dementia praecox cases furnished the data "used in locating and weighting the items incorporated in the prediction scales." The patients had been hospitalized in the Milledgeville State Hospital and furloughed a minimum of 5 years previous to the time of the study. The techniques of Burgess, the Gluecks, and Vold were used for prediction. The validation sample included 108 patients. Re-examination or non-reexamination "may be predicted with a degree of accuracy significantly greater than chance." "The predictive value of the scales far exceeds the predictive value of psychiatric judgment." It is thought that the techniques here used might be applicable to other mental disorders as well as in places other than mental hospitals.—*F. M. Teagarden* (Pittsburgh).

268. Jacob, J. S. The prediction of the outcome-on-furlough of dementia praecox patients. *Psychol. Bull.*, 1940, 37, 547.—Abstract.

269. Jacobson, E. Cultivated relaxation in psychoneuroses. *Psychol. Bull.*, 1940, 37, 569.—Abstract.

270. Jelliffe, S. E. The Parkinsonian body posture: some considerations on unconscious hostility. *Psychoanal. Rev.*, 1940, 27, 467-479.—Defence and sadistic reactions of the Parkinsonian syndrome occurring in cases of encephalitis and senile-arteriosclerosis show purposeful adaptation due to tension arising from a conflict of instincts. In studying the behavior it is necessary to consider the unconscious as well as the conscious; the control of the ego over instinctive drives may restore the body to adaptive functioning.—*G. Brighouse* (Occidental).

271. Katzenelbogen, S. Functional diseases of the gastro-intestinal tract—the viewpoint of the psychiatrist. *Dis. nerv. Syst.*, 1940, 1, 20-23.

272. Kelly, G. A. Some practical considerations in the formulation of clinical recommendations. *Psychol. Bull.*, 1940, 37, 576.—Abstract.

273. Kleist, K. Störungen des Denkens und ihre hirnpathologischen Grundlagen; paralogische und alogische Denkstörung. (Disturbances of thought and their pathological brain foundations; paralogical and alogical disturbance of thought.) *Gegenw. Probl. psychiat.-neurol. Forsch.*, 1939, 72-87.—[Abstracted review; original not seen.] Paralogical disturbances in schizophrenia are substitutions of related concepts and certain speech disorders. Alogical disturbances can be observed mainly in war injured patients as absence of the thought function. The localization of these disturbances in the brain is attempted.—*H. L. Ansbacher* (Brown).

274. Knight, R. P. The relationship of latent homosexuality to the mechanism of paranoid delusions. *Bull. Menninger Clin.*, 1940, 4, 149-159.—A theory is developed as to the origin of the strong homosexual love and the intense need to deny it which precede the phase of the paranoid psychosis covered by Freud's four-fold formula for the paranoid mechanism. "The hypothesis is presented that the kind of 'love' involved in Freud's primary proposition 'I love him' is a dangerous, ambivalent love, an intense need to love and be loved to deny the terrific repressed anal-sadistic hate. And the frantic need to deny this love in every way possible is due not to fear of social disapproval of homosexuality as such, but to intense anxiety for the safety of both subject and object because of the destructive anal-sadistic wishes which accompany the attempt to love and obtain passive anal gratification from the object." A brief case report is cited to provide supporting clinical evidence.—*W. A. Varvel* (Chicago).

275. Kopp, W. Die Unfruchtbarmachung der Asozialen. (The sterilization of asocial persons.) *Dtsch. Arztebl.*, 1939, Part 1, 66-69.—[Abstracted review; original not seen.] The difficulties encountered in the application of the law are discussed. Dissatisfaction is felt with the condition that sometimes harmless, industrious morons are sterilized while dangerous criminals are not.—*H. L. Ansbacher* (Brown).

276. Kuhlmann, F. One hundred years of special care and training. *Amer. J. ment. Def.*, 1940, 45, 8-24.—Briefly sketched by 25 year intervals beginning with the year 1850 are the important American views and practices in the treatment and training of mental defectives, and several policies that had at various times been proposed but which were never put into practice are discussed. Minimum essentials for success in the outside supervision of defectives which are now beginning to be used in various parts of the country are listed. The author finds that the greatest handicap of the mental

defective "is not the fact that he has failed to grow up mentally, but rather the neglect of an uninformed public that holds the key to his welfare but refuses to unlock the door."—*M. Kuensel* (Children's Home, Cincinnati).

277. **Liber, B.** The incipient psychoses and the specialties. *Med. Rec.*, N. Y., 1940, 152, 249-253.—The author discusses the thesis that all physical ailments have their mental concomitants and that no physical illness can ever be completely cured if the psychological attitude toward it is not rendered normal. Illustrative case material is cited.—*M. H. Erickson* (Eloise Hospital).

278. **Linden, H.** Bekämpfung der Sittlichkeitsverbrechen mit ärztlichen Mitteln. (Fighting sexual crime by medical means.) *Allg. Z. Psychiat.*, 1939, 112, 405-423.—[Abstracted review; original not seen.] In this discussion of homosexuality Linden takes the anthropological point of view. Although hereditary physiological factors regulate the strength of the sexual urge, it is the total personality which determines its direction and form. Homosexuality is mainly found in groups, clubs of perverts, or others, such as sport clubs where it is an incidental activity. The latter is considered the more dangerous form for adolescents. Homosexuals may form cliques with criminal or even political aims. The medical campaign against homosexuality includes psychotherapy (rather unsuccessful as yet); castration in recalcitrant cases; education devoid of prudery, mystery, and the idea of sin; and fostering of natural folk feeling, the goal of which is early marriage and procreation.—*M. E. Morse* (Baltimore).

279. **Linden, H.** Angeborener Schwachsinn. (Congenital feeble-mindedness.) *Off. Gesundheitsdienst*, 1939, 5, A273-A286.—[Abstracted review; original not seen.] The difficulties in the determination of congenital feeble-mindedness as required by law are considered. In spite of their faults intelligence tests are useful; school performance also has a certain value. Most important is the family background.—*H. L. Ansbacher* (Brown).

280. **Luxenburger, H.** Die erbbiologische Stellung der schizophrenen Psychosen. (The hereditary biological position of schizophrenic psychoses.) *Gegenw. Probl. psychiat.-neurol. Forsch.*, 1939, 88-100.—[Abstracted review; original not seen.] The soul is only a manifestation of the body and cannot become afflicted as such; every psychosis is based on a somatosis. The study of twins will be helpful in determining why, in spite of similar heredity, some individuals will develop psychoses, others not. The environment is recognized as a determinant in psychoses.—*H. L. Ansbacher* (Brown).

281. **Mack, C. W.** Prevention of recurrences in manic-depressive psychosis. *Dis. nerv. Syst.*, 1940, 1, 121-125.

282. **Maier, N. R. F.** Studies of abnormal behavior in the rat. IV. Abortive behavior and its relation to the neurotic attack. *J. exp. Psychol.*, 1940, 27, 369-393.—In this study the animal's

response tendencies were manipulated by modifying the jumping apparatus so that the same problem could be given under conditions which differed in the degree to which abortive behavior was possible. A close relationship was found between the appearance of abortive behavior and the disappearance of the neurotic pattern. In 2 cases the experiment was carried to the point where the neurotic pattern was eliminated and reinstated several times by controlling the abortive response, i.e., the animals could be cured. In 3 other cases in which air stimulation alone was adequate to produce attacks attempts to produce a cure failed. Because abortive behavior may be said to resolve the conflict created by the excitation produced by the air and the inhibition produced by the negative member of the discrimination cards, the presence of conflict seems to be a basic factor in the appearance of attacks. To show that some rats show attacks to air stimulation alone does not rule against this interpretation. In such animals conflict is either not essential or it is present in a less obvious form.—*H. W. Karn* (Pittsburgh).

283. **Malzberg, B.** Trends in the growth of population in the schools for mental defectives. *Amer. J. ment. Def.*, 1940, 45, 119-126.—No sound statistical evidence is available that there has been an increase in the prevalence of mental deficiency within recent decades. The author presents a statistical study of admissions to institutions for the feeble-minded and finds a steady growth in number of institutions caring for mental defectives and an annual increase in the number of patients under treatment. However, such growth is an index not of an increase in the number of defectives in the community but of the provision of more adequate facilities for their care.—*M. W. Kuensel* (Children's Home, Cincinnati).

284. **Marchand, L.** Maladies mentales. Études anatomo-biologiques. (Mental diseases. Anatomobiological studies.) Paris: Legrand, 1939. Pp. 435. Fr. 100.—[Abstracted review; original not seen.] In this treatise purely psycho-pathological disease entities are refuted, syndromes are considered as expressions of previously formed modes of reaction, and the organismic approach is stressed, particularly pathologic-anatomical aspects.—*H. L. Ansbacher* (Brown).

285. **Martin, R. F.** The incidence of Maier-type neuroses in emotional and nonemotional strains of rats. *Psychol. Bull.*, 1940, 37, 582.—Abstract.

286. **Monrad-Krohn, G. H.** [The problem of aphasia and amusia.] *Nord. Medicin*, 1939, 1267-1272.—[Abstracted review; original not seen.] The psychological theory of aphasia founded by Marie, Head, and Goldstein as a reaction against the localization theory is in danger of committing the same error as the latter, namely of going beyond the limits set by the findings. Further research is needed. English summary.—*H. L. Ansbacher* (Brown).

287. **Moreno, J. L.** Mental catharsis and the psychodrama. *Sociometry*, 1940, 3, 209-244.—A review of the history and development of the theory

and practice of the psychodrama, as presented in a course of lectures during the 1940 Summer Session of the Psychodramatic Institute.—*L. J. Stone* (Vaassar).

288. Myers, G. What is a psychiatrist? *Dis. nerv. Syst.*, 1940, 1, 43-50.

289. Myerson, A. The social psychology of alcoholism. *Dis. nerv. Syst.*, 1940, 1, 43-50.

290. Ohmann, O. A. The psychology of the handicapped. *Crippled Child*, 1940, 18, 3-4.—(*Educ. Abstr.* V: 958).

291. Paleari, A. [The clinical picture in "infanto-juvenile regression."] *Riv. Patol. nerv. ment.*, 1939, 54, 139-160.

292. Pollock, H. M. Organization of a family-care colony for mental defectives. *Amer. J. ment. Def.*, 1940, 45, 73-77.—Family care of mental defectives is here and will continue to supplement institutional care. Its essential requirements are: (1) a comprehensive plan of operation, (2) employment of competent personnel, and (3) adequate funds. These topics are discussed and an outline of a family-care colony to be used here in this country is presented.—*M. W. Kuenzel* (Children's Home, Cincinnati).

293. Portis, S. A., & Kasanin, J. Psychosomatic factors concerned in recurrent diarrhea. *Dis. nerv. Syst.*, 1940, 1, 23-30.

294. Preston, G. H. Psychiatry for the curious. New York: Farrar & Rinehart, 1940. Pp. 148. \$1.50.—A popular discussion of psychiatry with emphasis on the organic unity of the individual is presented. It includes a survey of the factors influencing behavior, of the principal periods of stress, and of the main groups of major and minor functional and organic disorders. General indications as to effective treatment are given, but the uniqueness of each patient is stressed. Adequate therapy involves a proper balance between medication, re-education of attitudes, and reorganization of the life pattern—a balance to be determined by the peculiar needs and circumstances of the individual case.—*H. Beaumont* (Kentucky).

295. Price, B., & Halperin, S. L. Sterilization laws—bane or banner of eugenics and public welfare? *Amer. J. ment. Def.*, 1940, 45, 134-144.—Ideas regarding sterilization should be divorced from those of pressure for institutional retrenchment. Compulsory sterilization has but slight eugenic value, and is not a panacea for welfare work. Two points about sterilization are discussed in detail. "The first is that, genetically considered, although the total distribution is affected in a desirable direction, sterilization can promise no significant change in the form of a population's intelligence distribution. The second is that mental deficiency can be approached and dealt with in relative terms, but not in terms of any absolute measurements as yet discovered or likely to be discovered."—*M. W. Kuenzel* (Children's Home, Cincinnati).

296. Reik, T. *Aus Leiden Freuden*. (Joy from suffering.) London: Imago, 1940. Pp. 404. 12s. 6d.

—Freud's conception of masochism as inverted sadism is incorrect. Its real basis is fantasy, and in fantasy it culminates. The reversal of values, often considered symptomatic of masochism, is apparent rather than real. Punishment, suffering, and shame are accepted voluntarily so that the masochist may earn the right to enjoy the denied satisfaction. While the sexual aspect predominates in masochistic perversions, it is present also in social masochism. Aggressiveness, lust for power, and ambition appear prominently in disguised form, while the erotic relation to a hero or a rival always looms in the background. Sexual needs and ego needs both are satisfied in all forms of masochism. The formula, victory through defeat, expresses all of the characteristics involved. Punishment, rather than keeping the masochist from obtaining satisfaction, aids him in achieving it. Always looking to the future, he gladly accepts suffering in the expectation that his ultimate triumph, here or hereafter, will taste the sweeter for it: he loses every battle but the last one.—*H. Beaumont* (Kentucky).

297. Richards, E. L. Medical confusions of the psychoneuroses. *Dis. nerv. Syst.*, 1940, 1, 69-73.

298. Rittmeister, J. Der augenblickliche Stand der Poliklinik und ihre künftigen Aufgaben. (The present status of the polyclinic and its future tasks.) *Zbl. Psychother.*, 1940, 12, 88-96.—Rittmeister reviews the emancipation of psychotherapy of the neuroses from psychiatry, neurology, and internal medicine and its establishment as an autonomous specialty. The organization and methods of the German Institute for Psychological Research and Psychotherapy are described. An increasing proportion of the patients are children and persons referred by the courts. The author prefers the rational approach to the intuitive and mystical.—*M. E. Morse* (Baltimore).

299. Rotter, J. B. Studies in the use and validity of the Thematic Apperception Test with mentally disordered patients. I. Method of analysis and clinical problems. *Character & Pers.*, 1940, 9, 18-34.—Recent trends in the clinical study of personality have emphasized the use of apperceptive tests for delineating attitudes or complexes, but these tests have been subject to such limitations as lack of objectivity, validity, or adequacy of material. In the thematic test which is designed to overcome to some extent these weaknesses the client is asked to write a story suggested by pictures. Subjects used in its development were mental patients suffering from various types of functional diseases.—*M. O. Wilson* (Oklahoma).

300. Rubisoff, R. B. A study of the intelligence of institutionalized epileptics of the idiopathic type. *Psychol. Bull.*, 1940, 37, 577.—Abstract.

301. Schilder, P. Introductory remarks on groups. *J. soc. Psychol.*, 1940, 12, 83-100.—A paper read at the round table discussion on group psychotherapy at the 1938 meeting of the American Psychiatric Association.—*G. Brighouse* (Occidental).

302. Schmeideberg, M. Anxiety states. *Psychol. anal. Rev.*, 1940, 27, 439-449.—Anxiety states arise from (1) childhood fears through projection, (2) repressed sexual impulses, and (3) worry over the effects of masturbation. In treating anxiety states the cause should not be repressed, but the patient should be encouraged to discuss or indulge in the action he fears might be wrong or harmful.—G. Brighouse (Occidental).

303. Schultz, J. H. Vorschlag eines Diagnosen-Schemas. (A proposed diagnostic outline.) *Zbl. Psychother.*, 1940, 12, 97-161.—The outline is the cooperative production of a committee from the staff of the German Institute for Psychological Research and Psychotherapy. It is not a comprehensive system but rather a classification, from a pluralistic viewpoint, for practical and scientific purposes. The main divisions are conditions in which psychotherapy is only accessory or palliative (organic diseases, psychoses, hereditary degenerative psychopathies, etc.), and conditions in which psychotherapy may be curative (neurotic personalities, addictions, organ neuroses, etc.). Each subgroup is discussed.—M. E. Morse (Baltimore).

304. Seligman, C. G. A note on neurosis in three celebrated Chinese painters. *Character & Pers.*, 1940, 9, 49-50.—Kuo Hsi and Mi Fei (eleventh century) could be regarded as obsessional. Pien-tsai (seventh century) was afflicted with functional dysphagia.—M. O. Wilson (Oklahoma).

305. Siebeck, R. H., Schultz-Hencke, H., & Weizsäcker, V. v. Über seelische Krankheitsentstehung. (The psychogenesis of organic diseases.) Leipzig: Thieme, 1939. Pp. 56. RM. 1.80.—[Abstracted review; original not seen.] This is a collection of lectures. Siebeck expounds the internist's view. Organic and functional are not opposites; the etiology of organ neuroses is multiple; psychogenic and neurotic are not identical. Schultz-Hencke presents the psychotherapeutic standpoint, especially that of the personal unconscious. Weizsäcker discusses the influence of the psyche on the course of circulatory diseases.—M. E. Morse (Baltimore).

306. Snyder, W. U., & Cohen, L. H. Validity of imagery testing in schizophrenia. *Character & Pers.*, 1940, 9, 35-43.—The test consists of 25 phrases found to be the most differential of 130 items previously studied. On the basis of norms established, the test was rechecked on new subjects and found to be non-differentiating between normals and schizophrenics or between schizophrenic subtypes. The scores are unrelated to intelligence or length of hospitalization but do correlate to a fair degree (.51) with those on the Kent-Rosanoff test. It is concluded that the test is not a valid diagnostic test of imagery in schizophrenia, since it rather measures degree of confusion of the associative processes and of ability to concentrate, two processes which may be normal in schizophrenics.—M. O. Wilson (Oklahoma).

307. Weber, F. W. A. Wie sollen wir uns in einem zukünftigen Kriege zu den Kriegsneurotikern stellen? (What stand should we take in a future war towards cases of war neurosis?) *Munch. med. Wschr.*, 1939, 86, Part II, 1305-1306.—[Abstracted review; original not seen.] Those afflicted with heavy trembling should be brought together in special detachments and employed in manual labor regardless of their disorder. Their place of work should be quite near the front lines where danger is not much less than for the actual fighters. Where hospitalization is necessary it should be of short duration.—H. L. Ansbacher (Brown).

308. Wechsler, Z. Medizinisches Allerlei aus den Salomon-Inseln. (Medical medley from the Solomon Islands.) *Schweiz. med. Wschr.*, 1939, Part II, 816-819.—[Abstracted review; original not seen.] Psychoses are frequent, schizophrenia being the most prevalent form, but paranoid states never occur. The natives show their insane little sympathy.—H. L. Ansbacher (Brown).

309. Worchel, P., & Lyerly, J. G. The effects of prefrontal lobotomy on depressed patients. *Psychol. Bull.*, 1940, 37, 545.—Abstract.

310. Wright, H. W. A psychological study of the nature of mental deficiency. *Psychol. Bull.*, 1940, 37, 572.—Abstract.

311. Yacorzynski, G. K., & Neyman, C. A. Reactions of psychotics. *Psychol. Bull.*, 1940, 37, 577.—Abstract.

[See also abstracts 180, 217, 339, 350, 410, 445, 451, 577, 613.]

PERSONALITY AND CHARACTER

312. Auersperg, A. Ärztliche Beurteilung des Charakters. (Physician's judgment of character.) *Wien. klin. Wschr.*, 1938, 51, Part 2, 1292-1296.—[Abstracted review; original not seen.] The author warns the physicians of the elite guard that the ordinary practitioner can judge character no better than any private and that a psychiatrist should be consulted where necessary.—H. L. Ansbacher (Brown).

313. Beck, M. P. A short form of the Terman-Miles masculinity-femininity test. *Psychol. Bull.*, 1940, 37, 583.—Abstract.

314. Brintnall, A. K. A preliminary study of persistence and ability. *Psychol. Bull.*, 1940, 37, 585.—Abstract.

315. Brown, F. A note on the stability and maturity of Jewish and non-Jewish boys. *J. soc. Psychol.*, 1940, 12, 171-175.—Results on the Brown Personality Inventory and the Furley Developmental Age scale show that differences between 91 non-Jewish and 67 Jewish boys are statistically insignificant with the exception of school adjustments, in which the Jewish boys show significantly higher scores.—G. Brighouse (Occidental).

316. Burnham, R. W. Case studies of identical twins. *J. genet. Psychol.*, 1940, 56, 323-351.—

Anthropometric, intelligence, and personality tests, as well as tests of physical skill, were administered to 3 sets of twins, each diagnosed as monozygotic and reared together. The first pair of female twins showed unusual similarity in appearance and in attitudes, interests, and personality; the chief difference lay in the Bernreuter dominance-submission score (86.0 vs. 58.8 percentile). The second pair of female twins had Kuhlman-Anderson IQ's differing by 7 points (108.9 vs. 101.6) and showed important differences on various personality tests. The third pair of male twins was highly similar in physical characteristics, differed in K-A IQ by less than 2 points, but displayed definite personality differences. Detailed data are presented on all tests for all subjects.—*D. K. Spelt (Mississippi)*.

317. Carlson, H. B., & Harrell, W. An analysis of "Life's" 'Ablest Congressman' poll. *Psychol. Bull.*, 1940, 37, 581.—Abstract.

318. Cattell, R. B. Sentiment or attitude? The core of a terminology problem in personality research. *Character & Pers.*, 1940, 9, 6-17.—It would be impossible to make a study of the genetic development of personality without the use of the term sentiment or one of its equivalents. One of the nearest equivalents is attitude which threatens to supplant sentiment. The 2 words are not synonymous and the uniqueness in meaning of each should be preserved. The author proposes a more appropriate definition of each and adds a third word of his own coinage, metanerg (meta and erg), all 3 describing acquired neuropsychic dispositions to react. Metanerg is a disposition to react emotionally, cognitively, or conatively towards a situation in a stable manner, with or without awareness of the goal of reaction. Sentiment is a relatively permanent major disposition to react emotionally, cognitively, and conatively toward a certain object in a stable fashion with awareness of object and manner of reacting. Attitude is a disposition to react with belief, thought, feeling, and overt behavior in a certain way towards a certain object as part of the purposive plan of a larger sentiment, with full awareness of the object and mode of reacting. 18 references.—*M. O. Wilson (Oklahoma)*.

319. Coffin, J. H. Visual outline of the psychology of personality. New York: Longmans, Green, 1940. Pp. 81. \$75.—This addition to the Students' Outline Series outlines the material from the standard texts on the topic of personality in 8 chapters: introductory orientation, the bio-psychological approach, what it means to be a person, the problem of personality types, bio-psychological backgrounds of personal style, personal styling, final summary, and synthesis. A bibliography and an index are appended.—*J. McV. Hunt (Brown)*.

320. Del Greco, F. Linee di caratterologia normale e patologica. *Psicologia del carattere*. (Outlines of normal and pathological characterology. Psychology of character.) *Ann. Osp. psichiat. Perugia*, 1937, 31, 161-205, and 1938, 32, 1-42.—[Abstracted review; original not seen.] History,

methods, and theories of characterology are presented and the most important types described, including the neurotic.—*H. L. Ansbacher (Brown)*.

321. Dudycha, G. J. Self-estimates and dependability. *J. soc. Psychol.*, 1940, 12, 39-53.—A questionnaire on habits of punctuality and dependability was given to students who had been classified in previous studies as early or late for classes and appointments, and as dependable or undependable in returning library books. In general, early students know that they are usually early, but late students tend to classify themselves as coming just in time. Few of the questions on dependability differentiated reliably between dependable and undependable students.—*G. Brighouse (Occidental)*.

322. Duffy, E. A critical review of investigations employing the Allport-Vernon Study of Values and other tests of evaluative attitude. *Psychol. Bull.*, 1940, 37, 597-612.—This review summarizes, and presents interpretative comments upon, studies in which the Allport-Vernon test, or other tests of evaluative attitude, have been employed. Major studies which have appeared since the 1933 review by Cantril and Allport (see VIII: 3138) are considered. It is claimed that the approach to the study of personality through tests of evaluative attitudes has proved its worth. Discussions of technical matters, such as reliability, validity, scoring techniques, and the classification of attitudes through factor analysis are included.—*A. W. Melton (Missouri)*.

323. Eisenberg, P. The motivation of expressive movement. *J. gen. Psychol.*, 1940, 23, 89-101.—The generality of expressive movement, i.e., its organization, is not apparent from the studies on the subject. Nor have tests and experimental methods (with the results of which expressive movement may be correlated) indicated the presence of enduring qualities of the personality. Further difficulty in measuring basic personality structures through expressive movements are: (1) Such movements are surface behavior, and their causal relations are complex and unknown. (2) The problem of the organization of such movements is an individual problem, whereas the research method used has been correlational, involving groups. (3) Many factors influence behavior other than the basic personality structure. "It is suggested that the problem of the organization of personality be attacked at both levels, of motivation and expressive movement, making the individual the unit of research, with the ultimate possibility of isolating motivational-mechanism 'types'." 26 references.—*C. N. Cofer (U. S. Employment Service)*.

324. Frazier, E. F. Negro youth at the crossways. Washington, D. C.: American Council on Education, 1940. Pp. xxiii + 301. \$2.25.—This is one of a series of studies undertaken by the American Youth Commission of the American Council on Education in a survey of the personality development of negro youth as affected by their membership in a minority racial group and as manifested in different parts of

the country. The present study is concerned with negro youth of the borderline states and is based on data secured principally from the negro communities of Washington, D. C., and Louisville, Kentucky. The general features of the negro community of the border states are described and the experiences of 268 young people who live in this comparatively isolated world are analyzed. Interview material is organized in relation to the family, the neighborhood, the school, the church, job-hunting, and social movements and ideologies. Following the analysis, two systematic and complete case studies are presented, one of a middle-class negro boy, the other of a lower-class negro girl. The first case is discussed from a psychiatric point of view by H. S. Sullivan. Additional statements and materials are presented in appendices.—C. Glick (Brown).

325. Frenkel-Brunswik, E. Reliability and meaning of ratings of motivational patterns. *Psychol. Bull.*, 1940, 37, 589.—Abstract.

326. Gilkinson, H., & Knower, F. Individual differences among students of speech as revealed by psychological tests. I. *Quart. J. Speech*, 1940, 26, 243-255.—Based on instructor ratings, good speaker and poor speaker groups were selected and compared with respect to scores on certain psychological tests. The present article gives critical ratios for the sub-scores of the Bell Inventory and for the 28 items of the Inventory which show clearest differentiation between responses of good and poor speakers. Most of these items are classified as social adjustment items. Inspection of these indicates that the most significant items are direct, i.e., question the student about his feelings and behavior in situations involving the use of speech.—W. H. Wilke (New York University).

327. Glaser, E. M., & Maller, J. B. The measurement of interest values. *Character & Pers.*, 1940, 9, 67-81.—Weaknesses of the Allport-Vernon Study of Values test, found in various investigations (Thurstone, Lurie, Van Dusen, Schaeffer), are discussed. A substitute test, The Interest-Values Inventory, embodying the following improvements, is presented: (1) The social value is less heterogeneous and more reliably measured. (2) The political and the religious values, since they are similar to the economic and the social values, respectively, are eliminated. (3) An indirect measure of interest through word association is provided. (4) The reliability is greater. (5) An absolute measure of interest is provided. (6) Each problem includes 4 alternatives.—M. O. Wilson (Oklahoma).

328. Goodman, V. Factor analysis of twenty personality items. *Penn. St. Coll. Stud. Educ.*, 1940, No. 22, 23-24.—Abstract.

329. Hampton, P. Personality and success in selling. *Person. J.*, 1940, 19, 108-115.—Dodge found that successful traveling salesmen scored higher in social dominance than retail salesmen, but they all tested relatively high on this trait. When the most discriminatory questions on the Bernreuter were selected for use with another group of salesmen,

they gave high correlations with selling success. Stead found the highest correlations between selling success and social and economic status, height, job previously held, and education. Husband found the successful sales-persons to be well balanced emotionally, self-confident, self-sufficient, and extroverted. Ream found that successful insurance salesmen scored especially high on tests of meeting objections, interest analysis, and personal history. Schultz, Lovett and Richardson, and Anderson all emphasize the importance of dominance and extroversion in selling. Anderson found, however, that the high-cost salesmen were much less dominant and extrovert than the low-cost salesmen.—M. B. Mitchell (Independence State Hospital, Iowa).

330. Hollmann, W. *Krankheit, Lebenskrise und soziales Schicksal*. (Disease, life crisis, and social fate.) Leipzig: Georg Thieme, 1940. Pp. 192. RM. 8.50.—[Abstracted review; original not seen.] The author shows, on the basis of a great number of medical case histories, that the course of somatic diseases is determined to a large extent by the adjustment of the patient to his environment. Illness must be understood as a crisis for the patient regarding his personality development and his position within the social order.—H. L. Ansbacher (Brown).

331. Huntley, C. W. A study of 'unconscious' self-judgment. *Psychol. Bull.*, 1940, 37, 582.—Abstract.

332. Ichheiser, G. The image of the other man, a study in social psychology. *Sociometry*, 1940, 3, 277-291.—The so-called phenomena of expression should properly be divided into problems of expression and impression which must be treated independently. Phenomena of expression must be viewed from the standpoint of the personality, and the real tendencies within it, while those of impression are social phenomena, representing the image of the other man. The inner personality can evade social control, but present a socially adapted image. The problems of the image of the other man arise from the discrepancy between interior and exterior, a problem of deception. A program of research based on these concepts is briefly outlined.—L. J. Stone (Vassar).

333. Johnson, D. M. Confidence and achievement in eight fields of knowledge. *Psychol. Bull.*, 1940, 37, 573.—Abstract.

334. Johnson, W. B. The social meaning of mood. *J. soc. Psychol.*, 1940, 12, 163-169.—30 members of a sorority ranked each other on cheerfulness, changeableness of mood, tenseness, and likeability. There were no significant correlations between moodiness and popularity, from which it is concluded that although mood may be a disadvantage in intimate family relationships it is not necessarily a social drawback in inter-friend relationships.—G. Brighouse. (Occidental).

335. Katsoff, E. T., & Howard, A. Analysis of the J-curve hypothesis. *Psychol. Bull.*, 1940, 37, 582.—Abstract.

336. Koran, S. W. A study of the developmental age, Brown personality inventory scores, and certain other traits in elementary school boys. *Penn. St. Coll. Stud. Educ.*, 1940, No. 22, 33-34.—Abstract.
337. Kuhlen, R. G. The Pressey interest-attitude test as a measure of personality at the college level. *Psychol. Bull.*, 1940, 37, 583.—Abstract.
338. Leeuwe, J. de. [Myth analysis in unselected subjects.] *Psychiat. neurol. Bl., Amst.*, 1939, 43, 333-354.—[Abstracted review; original not seen.] The development from nothing through chaos to a differentiated world, as it is found in the various creation myths, can be observed also in the development of the individual. By retrospection it can be recalled into consciousness, although unconscious mechanisms may cause certain changes or omissions. The relationship between myths and dreams is pointed out. Through 4 different creation myths several persons have been analyzed and insight into their personalities gained.—H. L. Ansbacher (Brown).
339. North, E. A. Psychopathic personality. *Dis. nerv. Syst.*, 1940, 1, 136-142.
340. Orr, D. The relation between corrected vision and personality traits. *Peabody J. Educ.*, 1940, 17, 341-349.—Case records indicate that an exclusive use of the Ophthalmic Telebinocular in testing vision would lead to rash conclusions in 15% of 115 cases. However, it was the means of most value in the preliminary investigation of visual defects. Other data were secured from such simple tests as the Snellen chart, a kaleidoscope, and the distance at which a child could look into some other person's eyes without discomfort. On the basis of such data, children were referred to specialists for medical treatment. The writer holds that properly corrected vision brings about improvement in personality traits, shown first in the changed expression of the face and in the carriage of the body, and shown later in the increased happiness resulting from successful endeavor.—N. B. Cuff (Eastern Kentucky).
341. Peters, J. H. Mis-mated. The principles of incompatibility of temperaments in marriage and family life. London: John Bale, 1938. Pp. 213. 7s. 6d.—[Abstracted review; original not seen.] On the basis of Jung's personality types the author attempts to reach an understanding of the unhappy marriages of Milton, Verlaine, Molière, Byron, Shelley, Heine, and Wagner.—H. L. Ansbacher (Brown).
342. Rombouts, J. M. Untersuchung mit undeutlichen (nebeligen) Schattenbildern. (Investigation with unclear, hazy, shadow pictures.) *Psychiat. neurol. Bl., Amst.*, 1939, 43, 311-317.—[Abstracted review; original not seen.] In distinction from the Rorschach technique outlines of human or animal figures are shown and a set of questions is asked after the presentation. By this method a preliminary understanding of the personality is afforded within $\frac{1}{2}$ hour.—H. L. Ansbacher (Brown).
343. Rotter, J. B., & Rodnick, E. H. A study of the reactions to experimentally induced frustration. *Psychol. Bull.*, 1940, 37, 577.—Abstract.
344. Schröder, P. Jugend-Charakterkunde. (Characterology of youth.) *M Schr. Kinderheilk.*, 1940, 83, 179-185.—The author warns not to classify children into types hastily without relating their dominant trait to their total personality. Although the psychiatrist is best qualified by experience to diagnose children's character, his work should be supplemented by the pediatrician's. The question of hereditary and acquired characteristics and that of individual differences in infants has received too little attention.—P. L. Krieger (Leipzig).
345. Thornton, G. R. How general is the factor of "persistence"? A reexamination and evaluation of Ryans' results. *J. gen. Psychol.*, 1940, 23, 185-189.—This is a criticism of 2 papers published by Ryans (see XIII: 857; 858) on the factor of persistence. Conclusions drawn by Ryans on the basis of a factor analysis of intercorrelations among 18 test scores are criticized for 3 reasons: (1) the correlations were unreliable; (2) in extracting the first factor loading, Ryans failed to reflect the signs in 3 columns that had a negative algebraic sum; (3) the centroid factor loadings were not rotated. That Ryans demonstrated his test of persistence to have validity is denied. The writer raises questions as to the generality of persistence and what the term means.—C. N. Cofer (U. S. Employment Service).
346. Varnum, W. C. Some personality differences between "terminal" and "university" students. *Psychol. Bull.*, 1940, 37, 595.—Abstract.
347. Vlad, C. [Psychology as part of physiology.] *Rev. sanit. milit., București*, 1939, 38, 133-140, 201-207.—[Abstracted review; original not seen.] According to the author personality is composed of the vegetative, the social, and the rational self. For good adjustment proper balance of the 3 aspects is required. Hyper- or hypotrophy of any one causes certain characteristic maladjustments French summary.—H. L. Ansbacher (Brown).
348. Wager, C. E. Secrets of the mind. London: Watts, 1940. Pp. 159. 5s.—[Abstracted review; original not seen.] This book deals with the mechanisms usually included in the Freudian formulation. The chapters deal with questions concerning family life, marriage, motives, religion, neuroses, and dictators.—F. W. Finger (Brown).
349. Whisler, L. Context for immaturity of purpose and other social maladjustments. *Psychol. Bull.*, 1940, 37, 548.—Abstract.
350. Young, K. Personality and problems of adjustment. New York: Crofts, 1940. Pp. x + 868. \$4.25.—This book, divided into 3 parts, foundations of personality, selected problems of personal adjustment, and certain wider implications, containing respectively 13, 15, and 2 chapters, is designed as a college text for the courses in psychology of personality, mental hygiene, and as an orientation to the interplay of personality, society, and culture. In addition, it constitutes a supplementary text in social psychology, sociology, social work, and education courses dealing with personal adjustment problems. Representative topics covered by the

various chapters relate to constitutional foundations of behavior, neural and glandular; the interplay of heredity and environment; drives, cycles of activity, and emotions; groups and culture; language, thought, and the self; methods of studying the personality; theories and types of personality; the induction of the child into the family and aspects of fundamental training; problems of adolescence and maturation; pupil adjustment, and teacher-pupil and teacher-community relations; mental hygiene for college students; adjustment in marriage, the dissolution of the family; the personality of juvenile delinquents and of the adult criminal; adjustments associated with constitutional deficiencies; neurotic and psychotic manifestations of personality; integration and balance through religion, art, and avocation; and a final chapter on personality, society, and culture. An appendix containing an outline for writing a case history, a 32-page bibliography, and indices of names and of subjects are given.—*M. H. Erickson* (Eloise Hospital).

[See also abstracts 137, 142, 143, 384, 388, 427, 497, 510, 545, 549, 587.]

GENERAL SOCIAL PROCESSES

(incl. Esthetics)

351. [Anon.] Gallup and Fortune Polls. *Publ. Opin. Quart.*, 1940, 4, 533-553.—This is a complete quarterly compilation of Gallup and Fortune polls results, arranged topically and chronologically. The AIOP reports cover the period from April through June 1940. The Fortune results are those appearing in the April, May, and June issues of the magazine.—*K. B. Breland* (Minnesota).

352. Bain, R. Appraisal of research in the social sciences. *J. educ. Sociol.*, 1940, 14, 1-8.—A summary is presented of the activities of the Social Science Research Council in its program undertaken to evaluate research. Research in the social fields sometimes has been regarded with disdain, but definite forward steps have been made and in this progress the Social Science Research Council has been instrumental. "Doubtless in the relatively near future the social sciences will become as respectably 'scientific' as are the other two great classes of natural science. This will come about by the continued development of empirical research and its theoretical interpretation and systematization by men who do not question the basic assumption that social phenomena are natural phenomena."—*D. G. Ryans* (Cooperative Test Service).

353. Baller, W. R. The present social status of a group of adults who, when they were in school, were judged to be dull in mental ability. *Psychol. Bull.*, 1940, 37, 580.—Abstract.

354. Barnes, H. E., Becker, H., & Becker, F. B. [Eds.] *Contemporary social theory*. New York: Appleton-Century, 1940. Pp. xx + 947. \$5.00.—Designed as a textbook for advanced courses in the principles of sociology and as a reference in such allied fields as psychology, political economy, and

history, this book includes 23 papers contributed by 19 specialists. The authors are Barnes (5 chapters), H. Becker (2 chapters), E. E. Eubank, H. O. Dahlke, A. Goldenweiser (3 chapters), G. A. Lundberg, F. Thomas, J. A. Quinn, W. H. Howells, F. H. Hankins, K. Young and D. W. Oberdorfer, T. Parsons, W. Seagle, J. P. Shalloo, P. Klein, J. S. Roucek, M. J. Williams, and C. W. Mills. The book begins with discussions of the development of sociology, basic methods of research in social science, and the relations of the natural and the social sciences. There follow accounts of theories of environmental influence on society, biological data and social theory, the contributions of psychology and psychoanalysis, and the cultural approach to problems of social development. The concluding section considers some applications of social theory to the social sciences and public problems. Special emphasis is given to the interrelationships of the various social sciences and to current trends in the development of sociological theory. Extensive chapter references and a classified bibliographical appendix are provided.—*W. A. Varvel* (Chicago).

355. Benz, M. G. Family counseling service in a university community. *Teach. Coll. Contr. Educ.*, 1940, No. 800. Pp. xvi + 125.—2,863 requests made by 967 families who were clients of a family consultation bureau are analyzed. The families had on the average 1.6 children, and an income over \$2,500. The parents were between 25 and 45 years of age; the husband usually had a graduate degree and the wife a college degree. 3 problems of commonest concern were: the education of the children, the position of women, and the maintenance of individual family homes.—*J. M. Stalnaker* (Princeton).

356. Blankenship, A. B. Pre-testing a questionnaire for a public opinion poll. *Sociometry*, 1940, 3, 263-269.—To achieve accurate polling the wording of questions is as important as correct sampling. "The only method of insuring the quality of question wording is to conduct experimental advance tests by which accuracy can be established." Thorough understanding of the specific problem must precede questionnaire construction, and various factors must be taken into account: the critical character of the first few questions; the avoidance of ambiguity; the use of words "understood by the lowest class of respondents"; the use of questions that are reasonable and concrete; the adapting of questions to the type of person interviewed; neutral phrasing of questions; and avoidance of suggestion. With a questionnaire constructed according to these standards a pre-test of 25-30 interviews will eliminate difficulties in phrasing. The interviewer will observe the results in terms of the criteria stated, and if necessary attempt variations of wording. For greater accuracy a sample study is needed.—*L. J. Stone* (Vassar).

357. Blankenship, A. B. The "sample" study in opinion research. *Sociometry*, 1940, 3, 271-276.—When highly accurate information regarding the adequacy of a questionnaire is necessary, a limited

sample study may be conducted. In all respects the study is identical with the larger one, except that only 200-2000 respondents are interviewed. The sample study may determine whether the larger one is warranted; what final sample of respondents is to be interviewed; what order of questions is best (by varying the question sequence); and give information on the internal consistency and the reliability of the instrument.—*L. J. Stone* (Vassar).

358. **Brenman, M.** *Minority-group membership and religious, psychosexual, and social patterns in a group of middle-class negro girls.* *J. soc. Psychol.*, 1940, 12, 179-196.—A group of middle-class negro girls showed, in intensive interviewing, both a greater religiosity and greater religious conflict than a comparable group of whites. Age appears to be more important than race in determining psychosexual attitudes and practices, there being greater intra-group resemblances among 18-year-olds, for example, than among negro girls or white girls taken as a group without regard to age. Negro girls showed ambivalent attitudes toward white esthetic standards of male attractiveness.—*G. Brighouse* (Occidental).

359. **Bryant, M. M., & Aiken, J. R.** *Psychology of English.* New York: Columbia University Press, 1940. Pp. 229. \$2.50.—Opposing the traditional view that English has its foundations in logic, the authors defend the thesis that it has had instead a Topsy-like growth reflecting the mental characteristics of the people who use it. This being true, grammar is not the static and perfect system it is held to be by purists and pedants. When the same error is made independently by a great number of people it may be evidence of an existing weakness in language, and the forces toward a better equilibrium will then overcome the forces tending to maintain the status quo, a generally accepted change being the result. Among the human tendencies offered to account for these widespread deviations from conventional usage are laziness, arrogance, modesty, impatience, and desire for variety. Specific changes and general trends which have appeared within the history of the language are analyzed in terms of these influences.—*M. R. Sheehan* (Hunter).

360. **Cantril, H.** *America faces the war: a study in public opinion.* *Publ. Opin. Quart.*, 1940, 4, 387-407.—This article presents a picture of American opinion in connection with the war as of the end of July, 1940. Trends of opinion are traced from the spring of 1939 and opinion patterns, with consideration of the characteristics of people holding them, are studied. 6 points of interpretation are offered: "(1) By and large, public opinion does not anticipate emergencies; it only reacts to them. (2) Public opinion does not remain intensely aroused for a long period of time unless the people feel actually involved in a conflict. (3) During critical situations, the government seems more remote and less personal to the people who constitute the public. (4) At critical times, people in a democracy are willing to assign more rather than less responsibility to their

acknowledged leaders. (5) Public opinion, like individual opinion, is colored by desire. (6) Although public opinion is by no means always consistent, many of the inconsistencies are more apparent than real when the basic frames of reference are discovered from which specific opinions derive."—*K. B. Breland* (Minnesota).

361. **Carmichael, P. A.** *The unique aesthetic fact.* *Psychol. Bull.*, 1940, 37, 550.—Abstract.

362. **Chapin, F. S.** *Trends in sociometrics and critique.* *Sociometry*, 1940, 3, 245-262.—"Sociometry is a specialized division of . . . sociometrics, or social measurements. It is useful to recognize three areas of social measurement: first psychometrics, . . . second, demogrametrics, or measures of large units of population such as the community, a city or a state; and third, sociometrics proper, that includes scales to measure the interaction process within a social group, as well as scales that measure the family group and the home environment. There are five sub-types of measurement of interaction in the group. Informal friendship constellations . . . informal play groups of children . . . social participation in the institutional life of the community . . . social distance . . . measuring the city neighborhood." Examples are cited of researches in all these fields, and the usefulness of each technique is commented on.—*L. J. Stone* (Vassar).

363. **Chang, M. H.** [Psychology of the audience.] Shanghai: Commercial Press, 1938. Pp. 138. \$0.50. Mex.—This book discusses the kinds of audience and the process of conquering them, how to gain their attention, how to retain their interest, how to arouse their impressions, how to convince them by persuasions, and how to control them. The psychology of stage fright, selection and arrangement of the gathering place, as well as the cause and treatment of stuttering are also discussed.—*C. F. Wu* (Academia Sinica).

364. **Chang, T. S.** [Thought, language and culture.] *Sociol. World* (Chinese), 1938, 10, 17-54.—It is suggested that the difference between Western and Eastern thought lies in cultural and linguistic differences, and that Western logic is but a particular form of logic characteristic of the Western subject-predicate form of language construction, and that a theory of knowledge must be studied in relation to the cultural history of the society in which it is found. Thus the law of identity, the subject-predicate proposition in sentence-structure, and the categories of substance and causality in philosophy, take religious thought as a background and are characteristic of Western culture; while correlation-logic, non-exclusive classification, and analogical definition take political thought as a background and are characteristic of Chinese culture. These two types of thought differ not only in their categories and their basic rules of logic but also in their attitudes. Considering their attitudes in putting a question to anything, the Chinese concern may be characterized as the "how priority attitude" while the Western concern, the "what priority attitude."

So far as the basic human nature is considered, two kinds of residues may be distinguished, the residue of persistence and that of dominance. With these emotional drives come outward manifestations or derivations. From the residue of persistence develops Western culture, and from that of dominance develops Chinese culture. The difference is not absolute.—C. F. Wu (Academia Sinica).

365. Chen, H. P. [Psychology of rumors.] Changsha: Commercial Press, 1939. Pp. 68. \$0.35 Mex.—The author considers rumor as a psychosocial phenomenon which generally occurs in extraordinary situations as a collective response of the multitude and is characterized by (1) involvement of violent emotional elements, such as anxiety, hatred and fear, (2) evolution by simultaneous accumulation, and (3) powerful disintegrative and consolidating effects dominating over the crowd. The chapter headings are: introduction; rumor, its meaning; fundamental factors that cause the untrue report; principles underlying the evolution of rumors; foreboding rumors and child rumors; and influence of rumor.—C. F. Wu (Academia Sinica).

366. Chu, K. T. [Psychology of literature and arts.] (2nd ed.) Shanghai: Kai Ming Book Co., 1937. Pp. 344. \$1.00 Mex.—Topics are discussed in the following order: esthetic experience; some misunderstandings of esthetic experience; sense of beauty and associations; literature and morality, an historical retrospect and a theoretical reconstruction; beauty and ugliness, mistakes of naturalism and idealism (in the sense of Lalo); what is beauty; criticism of the school of Croce; origin of art and play; creation of art, imagination and inspiration, genius and men of art; sublime and grace; tragedy and comedy; laughter and comedy. At the end of the book, there are 3 additional chapters on color, form, and sound-beauty. References.—C. F. Wu (Academia Sinica).

367. Cook, S. W., & Welch, A. C. Methods of measuring the practical effects of polls of public opinion. *J. appl. Psychol.*, 1940, 24, 441-454.—With college students, it was found that knowledge of the results of the *Literary Digest's* poll in the 1936 presidential election influenced subjects to favor Landon, but the difference was not statistically significant. The results of a further investigation were inconclusive as to whether individuals who shifted their preference after knowledge of poll results were influenced by the poll.—E. E. Ghiselli (California).

368. Corey, S. M. Changes in the opinions of female students after one year at a university. *Psychol. Bull.*, 1940, 37, 573.—Abstract.

369. Davis, F. C. Stereotypes and their significance. *Psychol. Bull.*, 1940, 37, 587.—Abstract.

370. Eberhart, J. C. The "Chicago Tribune" and the Republic Steel strike: an analysis of one newspaper's influence on public opinion. *Psychol. Bull.*, 1940, 37, 574.—Abstract.

371. Edwards, A. L. Attitudes as a factor influencing remembering. *Psychol. Bull.*, 1940, 37, 574.—Abstract.

372. Farnsworth, P. R. The measurement of musical eminence. *Psychol. Bull.*, 1940, 37, 575.—Abstract.

373. Fay, P. J., & Middleton, W. C. Certain factors related to liberal and conservative attitudes of college students: parental membership in certain organizations. *J. soc. Psychol.*, 1940, 12, 55-69.—The Thurstone scales for the Measurement of Social Attitudes Toward Communism, Patriotism, the United States Constitution, Law, and Censorship were given to 587 students together with questionnaires on parental membership in the American Legion, its Auxiliary, the Chamber of Commerce, a labor union, a lodge, a service club, the Veterans of Foreign Wars, and the D.A.R. Students whose fathers are members of the V.F.W. tend to be more liberal than students whose fathers belong to the other organizations studied. Students whose fathers are members of the American Legion and the Chamber of Commerce tend to be more conservative. Differences tend to be greatest in attitudes toward censorship and communism and least in attitudes towards law. Students whose mothers are members of the American Legion Auxiliary tend toward conservatism; students whose mothers are members of a lodge tend to be more liberal toward communism than do those whose mothers are members of the D.A.R. Students in all the paternal organization groups combined tend to be more liberal in all 5 attitudes than students in all the maternal organization groups combined.—G. Brighouse (Occidental).

374. Foley, J. P., Jr. The occupational conditioning of preferential auditory tempo: a contribution toward an empirical theory of aesthetics. *J. soc. Psychol.*, 1940, 12, 121-129.—Tempo preferences for largo, larghetto, adagio, andante, allegro, and presto metronome beats were expressed by 684 girl students at a vocational high school. Those studying beauty culture, trade dressmaking, and domestic occupations tended to prefer an andante tempo; the power machine operating group, a low allegro; and the commercial typewriting group, a fast allegro, bordering on presto. The differences are statistically reliable. It is concluded that the general principles of esthetics cannot be stated either in terms of physical properties of stimulus objects or in terms of the characteristics of the response pattern. Instead, such principles must be formulated in terms of the reactional biographies of the subjects concerned.—G. Brighouse (Occidental).

375. Freeman, E. Conquering the man in the street: a psychological analysis of propaganda in war, Fascism, and politics. New York: Vanguard Press, 1940. Pp. 356. \$3.50.—An attempt is made to explain the success of Fascist propaganda in terms of psychological concepts. "The most satisfactory comprehensive generalization that could be made concerning the Fascist propaganda which overwhelmed its victims is that it utilizes, with monumental cynicism, the wide intellectual gulf existing between popular beliefs on the one hand and the sounder facts of responsible science on the

other." "It is worth remembering that Herr Hitler is, among other things, a prima donna of gangsters who, in the typical way, combines shrewdness, ruthlessness, and inordinate vanity."—*K. B. Brelan* (Minnesota).

376. Gorer, G. *Himalayan village*. London: Michael Joseph, 1938. Pp. 510.—[Abstracted review; original not seen.] This is a study of a village-dwelling tribe of the Himalayas, the Lepchas. Among other findings life-histories, methods of child rearing, and miscellaneous customs are reported. A general lack of aggression and self-assertion is noted in these people.—*H. L. Ansbacher* (Brown).

377. Greene, J. E., & Jacob, J. S. Racial differences in the occupational status of white and negro persons in Georgia between the ages of 19 and 25 years. *Psychol. Bull.*, 1940, 37, 557.—Abstract.

378. Gundlach, R. H. The psychology of nationalism as a major factor for war. *Psychol. Bull.*, 1940, 37, 590.—Abstract.

379. Gundlach, R. H. The psychologist's understanding of social issues. *Psychol. Bull.*, 1940, 37, 613-620.—Comparison of the answers of psychologists and undergraduate students to a questionnaire on social issues dealing with fundamental notions of democracy reveals that "in every case, a plurality or a majority of psychologists select the answers that are liberal, progressive, democratic." It is concluded that psychologists have knowledge and opinions of a professional sort about items relevant to public policy. The study was conducted at the time of the 1939 meeting of the American Psychological Association.—*A. W. Melton* (Missouri).

380. Hanks, L. M., Jr. A comparative study of the psychological effects of economic security. *Psychol. Bull.*, 1940, 37, 573.—Abstract.

381. Ho, Y. T. [Mental tests of the adolescent.] *Educ. News Wkly* (Chinese), 1939, 2, No. 4, 4-8.—A questionnaire of adolescents' psychology and interests (Forms A and B for boys and girls respectively) has been constructed and sent to junior and senior high school students, and replies were received from 527 boys (14-20 years old) in 1931. Form A comprises 482 items divided among 8 major questions. All questions were to be answered by a rating scale of 4 degrees, except the question on sex problem which was to be answered by a *plus* or a *minus* sign. Then, a mental test of adolescents which was a revision and enlargement of Form A, was administered to 515 senior high school students and 75 college freshmen (16-24 years old) who were then under mass military training in 1936. This test consists of 10 categories of questions. The questions were to be answered by multiple-choice, by rating scale of 4 degrees, and by *plus* and *minus* signs. The results showed among other things that: (1) concerning the Sino-Japanese problem, more than 90% of the students clearly saw that "it would be better to fight a deadly fight than to be annexed as a consequence of non-resistance" and fully understood

the importance of armament and military training; (2) concerning personality-worship, a radical change of opinions had taken place, viz., Gen. Chiang, our national leader, was most liked by 89% of the students in 1936, as compared with 18% in 1931; and (3) the adolescent boys were in favor of monogamy and free love, objecting to celibacy, and preferred girls of sound body and mind, well-balanced stature, mediocre beauty, etc.—*C. F. Wu* (Academia Sinica).

382. Hertzman, M. Studies in the principles of judgments and attitudes: III. The functional equivalence of two differently structured references. *J. soc. Psychol.*, 1940, 12, 3-19.—Two groups of students, given a list of 10 professions to be ranked for 4 characteristics, shifted their rankings, but not markedly, when given reference ratings in intelligence. The shift in judgment, as compared to rankings by a control group given no reference ratings, was slight. One group was given reference ratings of approximately zero correlation with the rankings of the control group, with all reference ratings altered. The other group was given a reference rating list with 4 professions altered and showed slightly higher acceptance of the reference.—*G. Brighouse* (Occidental).

383. Hole, C. *English folklore*. New York: Scribner, 1940. Pp. 191. \$3.00.—An account of some of the folklore and traditions of England which still exist or have only recently died out, with explanations of their origin and history.—(Courtesy *Publishers' Weekly*).

384. Hoover, H. A. A comparison of the scores of college senior women with the scores of happily married women on the Terman prediction scale. *Penn. St. Coll. Stud. Educ.*, 1940, No. 22, 29-30.—Abstract.

385. Jackson, T. S. Racial inferiority among negro children. *Crisis*, 1940, 47, 241-266.

386. Jenkins, I. Imitation and expression in art. *Psychol. Bull.*, 1940, 37, 550.—Abstract.

387. Johnson, D. M. Confidence and the expression of opinion. *J. soc. Psychol.*, 1940, 12, 213-220.—Individuals with strong anti-war and anti-censorship attitudes as measured by the Thurstone scales show more confidence in their answers than do those with pro-war and pro-censorship attitudes.—*G. Brighouse* (Occidental).

388. Kelly, E. L. Personality factors in assortative mating. *Psychol. Bull.*, 1940, 37, 576.—Abstract.

389. Koffka, K. Problems in the psychology of art. *Bryn Mawr Notes Monogr.*, 1940, 9, 180-273.—The work of art belongs in psychology as a phenomenally objective but functionally subjective datum. For this reason different observers may find different things in the same (physical) work of art. A work of art involves an Ego in relation to an object and this relation embraces the artist-creative as well as the spectator-beholder relation. Ego and object are in close dynamic relations in esthetic

experiences. Several theories of art and the emotions are criticized and the theory of physiognomic characters is proposed. These characters are qualities having requiredness which arise from a context including art and the Ego. The appeal of art resides in its structure and the criterion of good art is the extent to which all parts of the structure fit the whole, apart from any considerations extraneous to the art object. Similarly the creation of a work of art involves the submission of the artist to the "requiredness of his intended creation." Other topics treated include: art and morals, art and propaganda, light and serious art, the artist's personality, the spectator, and the reality of a work of art.—*Harry Helson* (Bryn Mawr College).

390. *Lehman, H. C.* The geographical origin of professional baseball players. *J. educ. Res.*, 1940, 34, 130-138.—Statistical study of 1,052 professional baseball players in regard to place of birth derived from 24 annual editions of *Who's Who in Baseball*. The results reveal wide differences in the numbers of players contributed by the different states and in proportion to the populations of these states, the southwest and south being high and the north and north central portions being low. The author cannot believe that this difference is due to one section producing more potential players than another section but interprets the results in terms of environmental factors such as climate responsible for length of playing season and such psychological factors as tradition and density of population sufficient to support professional teams.—*S. W. Fernberger* (Pennsylvania).

391. *Luh, C. W.* [Changes that are taking place in the Chinese language and Chinese thought forms.] *Sociol. World* (Chinese), 1938, 10, 1-15.—Changes in thought forms are discussed as they appear in linguistic forms. According to the author, the coming Chinese national language based upon the Peiping mandarin will have the strong accents flattened out and the supradental initials modified. It is possible that there will be further confusion in the use of ending consonants. As to the vocabulary, the transliteration of foreign words will not play an important role. Polysyllabic verbs will increase in number. This will by itself produce significant changes in syntax. In addition, the introduction of Western concepts and methods will perhaps necessitate the creation of new linguistic forms probably patterned on Western scientific language. In its far-reaching aspects the language of the learned will express more clearly the ideas of causality and contingency mainly by making explicit the usually missing conjunctions. Truth, morality, and appreciation will be differentiated.—*C. F. Wu* (Academia Sinica).

392. *Mann, C. W.* Religion and symbolism in Fiji. *J. gen. Psychol.*, 1940, 23, 169-184.—The religion of the Fijians is discussed under the following headings: belief in the supernatural, temples and worship, secret societies, witchcraft and magic, and the path of the spirit. Although the Fijians

made no images of their gods and did not worship material objects, they attached significance to certain objects concerning which there were elaborate rituals. The whales' tooth, a beverage (yanggona), various objects presented as symbols of welcome, dances, and fire-walking are discussed in this connection. While the old Fijian religion has been supplanted, symbolism is still an important part of the Fijian social life.—*C. N. Cofer* (U. S. Employment Service).

393. *Mannheim, K.* Man and society in an age of reconstruction. Studies in modern social structure. (Trans. & rev. ed.) New York: Harcourt, Brace, 1940. Pp. xxii + 469. \$3.50.—Modern mass societies may be viewed as moving through crisis, dictatorship, and war toward a possible state of planned freedom which is distinguished from *laissez-faire* freedom, with its disintegrating effects upon culture and social structure. The former emphasizes the role of the intelligentsia in devising and implementing an adequate continuing analysis of the relations between the principle of social continuity and that of fundamental democratization. The hitherto faulty development of the parliamentary social mechanism is due in large part to the extremely rapid transformation in recent years from a minority democracy to a mass democracy. Planned freedom in mass democracies may be achieved if a new division of labor is developed in the general social sciences, with heavy emphasis upon propaganda and other psychological social controls. The use of depth psychology for education of the emotions, especially among the intelligentsia, is emphatically indicated if freedom in the intellectual sphere is to be combined with the basic conditions of social life. "The problem of freedom is seen to consist in the creation of [planned] free zones within the planned structure. . . . Planning under communal control, incorporating safeguards of the new freedom, is the only solution possible at the present stage of social technique."—*B. L. Smith* (New York University).

394. *Marcy, E.* Changing ideologies of peace organizations in the United States from 1919 to 1939. *J. exp. Educ.*, 1940, 9, 87-90.—The sources of data used in this study were private and public documents, personal interviews, correspondence, and numerous studies covering the history of peace and related aspects of the pacifist movement. The author finds that most organizations present a broad program, but do not consciously attempt to develop attitudes through the use of recognized attitude-developing techniques. The greatest ineffectiveness of programs is attributed to inadequate understanding of educational techniques and failure to attempt to evaluate results. On the whole, there is little evidence of change toward or away from pacifism.—*H. W. Karn* (Pittsburgh).

395. *Mead, M.* Social change and cultural surrogates. *J. educ. Sociol.*, 1940, 14, 92-109.—The surrogates who are responsible for transmission of cultural standards from generation to generation are no longer the parents, omnipotent, and belong-

ing to another order, but the child's everyday companions. Age-grade standards have supplanted parental standards. However, the child is still inclined toward a parent-type of surrogate which is expressed in a tractability toward leadership. The existence of this state of readiness for leadership in the young people of this country represents a potentiality for desirable social change. It is suggested that the school step into the role that the home has been forced to abandon in order that youth be guided into desirable new patterns of living congruent with the aims of a democratic society.—*D. G. Ryans* (Cooperative Test Service).

396. Meier, N. C. Public opinion, expert opinion, and collective thinking. *Psychol. Bull.*, 1940, 37, 593.—Abstract.

397. Moore, J. E. A comparison of white and negro children on a simple eye-hand coordination test. *Psychol. Bull.*, 1940, 37, 555.—Abstract.

398. Moore, T. V. Family organization and mental problems. *Living*, 1940, 2, 100-102.—Defining the family as a "small social unit which provides for the physical, mental, moral, and spiritual welfare of its members" the author shows by case studies how poor external organization and lack of affection may bring about severe mental problems.—*L. M. McCabe* (Cambridge, Mass.).

399. Nelson, E. Student attitudes toward religion. *Genet. Psychol. Monogr.*, 1940, 22, 325-423.—3758 students in 18 state universities and denominational colleges were given a battery of 4 Thurstone scales and the Lentz C-R Opinionnaire, Form K. Attitudes toward the college attended, participation in campus activities, and certain other social factors were also studied. In general, women and underclassmen indicated more favorable attitudes toward Sunday observance, the church, the reality of God, and God as an influence on conduct. Follow-up investigations are planned.—*F. M. Teagarden* (Pittsburgh).

400. Noble, G. K. Symposium on the individual vs. the species. 4. The rôle of dominance in the social life of birds. *Auk*, 1939, 56, 263-273.—(*Biol. Abstr.* XIII: 18076).

401. Paulian, D. [Primitive mentality: the phenomena of Maglavit (the Roumanian Lordes) considered in the light of present-day psychological knowledge.] *Arch. Neurol. Bucarest.*, 1939, 3, 163-184.

402. Phillips, D. E. The human element in literature. New York: Fortune's, 1940. Pp. 230. \$2.00.—"Any piece of literature is great and lasting in proportion to how well it handles the psychological principles of human life. . . . The universal appeal of literature is mainly due to the fact that it feeds these natural, biological impulses, the great hungers of humanity. They lie too deep for scientific psychology. . . . Literature is the only human device that has yet given any fair account of this phase of humanity." Numerous brief quotations from such writers as Homer, Dante, Shakespeare, Goethe, and Ibsen are cited to illustrate the ap-

pearance in literature of the following psychological aspects: symbolism, achievement, emotion, suggestion, free will, crime, religion, abnormal psychology, and social psychology. In addition to separate chapters on each of these topics there are chapters on philosophy in literature, and human nature in music, art, and world stories. Reference is made principally to the psychology of G. S. Hall, James, McDougall, and Freud.—*J. T. Cowles* (Illinois).

403. Rackley, J. R. The relationship of the study of history to student attitudes. *J. exp. Educ.*, 1940, 9, 34-36.—An analysis of questionnaire data leads to the following conclusions: (1) College seniors who major in history do not view contemporaneous questions and problems differently from seniors who major in other fields of learning. (2) College seniors who have worked to support themselves while in school (earning 70% or more of their income) do not view contemporary problems and affairs differently from students who have not worked to support themselves while in college.—*H. W. Karn* (Pittsburgh).

404. Rashevsky, N. Contributions to the mathematical theory of human relations. III. *Psychometrika*, 1940, 5, 203-210.—In continuation of a previous study, somewhat more complex relations are considered for the case of interaction of two classes, of which one organizes the activities of the other. By way of illustration it is shown how different assumptions concerning the attitudes of the individuals to such an interaction of classes lead to different mathematical expressions.—(Courtesy *Psychometrika*).

405. Reichenbach, H. Gestalt psychology and form in music. *J. Musicol.*, 1940, 2, No. 2, 62-71.—Didacticism, melody, time, quality, scales, harmony, and key as well as other musical matters are discussed in terms of Gestalt theory.—*P. R. Farnsworth* (Stanford).

406. Rigg, M. G. The expression of meanings and emotions in music. *Psychol. Bull.*, 1940, 37, 556.—Abstract.

407. Ross, E. A. New-age sociology. New York: Appleton-Century, 1940. Pp. xvii + 597. \$3.25.—The author aims to present in this textbook the type of society in which we are now living and in which the population numbers about two-fifths of mankind. An index and lists of tests and challenges for each chapter are given at the end.—*K. S. Yum* (Chicago).

408. Schaefer, W. C. Multidimensionality in scaling concepts of government. *Psychol. Bull.*, 1940, 37, 568.—Abstract.

409. Schilder, P. Psychoanalysis of economics. *Psychoanal. Rev.*, 1940, 27, 401-420.—Marx and Freud both recognized that individuals live according to the demands of the unconscious, but Marx believed that the unconscious is governed by economic needs whereas Freud placed importance in libidinous needs. Economic needs, according to Marx, are the motivation of action, and action is a

more basic unit of experience than libido, ego instincts, or desires, as there is no perception, thought, or imagination without action. Ideologies from past civilizations make it necessary that we work to satisfy our super-ego, and the evaluation of work may arise out of the urge for power as well as out of psychological factors. The wish for power gives rise to the hoarding of exchange-value objects which are converted into use-value objects by work. Economic questions deal with crystallized work; psychology deals with work in action. Both must be combined for an understanding of economic problems.—G. Brighouse (Occidental).

410. Schneider, C. *Entartete Kunst und Irrenkunst*. (Degenerate and insane art.) *Arch. Psychiat. Nervenkr.*, 1939, 110, 135-164.—[Abstracted review; original not seen.] The views of Prinzhorn and Lange-Eichbaum on insane art are criticized. Degenerated art is really morbid because it is an attempted imitation of psychotic and primitive originals by abnormal, more or less degenerated persons, particularly communistic Jews.—H. L. Ansbacher (Brown).

411. Segal, B. Propaganda in news reports about Finland. *Psychol. Bull.*, 1940, 37, 574.—Abstract.

412. Sewell, W. H. The construction and standardization of a scale for the measurement of the socio-economic status of Oklahoma farm families. *Tech. Bull. Okla. agri. Exp. Sta.*, 1940, No. 9. Pp. 88.—Based on Chapin's definition of socio-economic status as a functional complex unit of 4 variables this scale yielded highly significant validity and reliability coefficients. List of references and appendixes.—K. S. Yum (Chicago).

413. Slight, D. Psychological and cultural factors in marriage. *Living*, 1940, 2, 103-104.—A brief general discussion of factors making for happiness in marriage.—L. M. McCabe (Cambridge, Mass.).

414. Smith, S. Test performance of mixed races compared with that of parent stocks. *Psychol. Bull.*, 1940, 37, 594.—Abstract.

415. Snowden, F. N. Race propaganda in Italy. *Phylon*, 1940, 1, 103-111.

416. Stagner, R. A correlational analysis of nationalistic opinions. *J. soc. Psychol.*, 1940, 12, 197-212.—Tetrachoric correlations of answers to the S.P.S.S.I. questionnaire on Methods of Preventing War are given.—G. Brighouse (Occidental).

417. Sutherland, R. L., & Woodward, J. L. *Introductory sociology*. (Rev. ed.) Philadelphia: Lippincott, 1940. Pp. xii + 863. \$3.50.—"In the attempt to bring the book up to date both in fact and concept, almost every chapter has been revised to include the latest findings, and large sections have been rewritten. Important additions have been made, especially in the sections on personality, forms of collective behavior, community and social organization, and social change. New chapters have been added to the sections on social interaction, social organization, and social change. The interaction section has been expanded to include

material on the process of co-operation and to deal more adequately with other social processes. In the social organization section, a new chapter dealing with social, recreational, and health agencies has been added."—A. B. Hunter (Brown).

418. Wachs, H. *Der Rasseninstinkt und seine Bedeutung für die Reinerhaltung der Arten*. (The racial instinct and its importance in keeping the species pure.) *Volk u. Rasse*, 1939, 14, 148-151.—[Abstracted review; original not seen.] Regarding racial instinct the author warns not to generalize too freely from plants and animals to man, because in man and even in higher animals marital selection is co-determined by psychological factors. Close community of living, such as in villages, promotes the emergence of sound biological races.—H. L. Ansbacher (Brown).

419. Watson, G. Some hypotheses concerning social change. *J. educ. Sociol.*, 1940, 14, 9-17.—Currently available facts seem to shed little light upon many fundamental problems of social theory. 49 hypotheses are suggested as starting points for research which may lead to useful factual information. The hypotheses are classified under 7 headings: origins, sequence, direction, leadership, propaganda, matrix, and intellectuals.—D. G. Ryans (Cooperative Test Service).

420. Wheeler, R. H. Effects of climate on human behavior. (Film.) *Psychol. Bull.*, 1940, 37, 574.—Abstract.

421. Young, P. V. The validity of schedules and questionnaires. *J. educ. Sociol.*, 1940, 14, 22-26.—It is suggested that schedules and questionnaires may be used to advantage in social research when the following considerations are observed: (1) the point of view of the group studied must be carefully considered; (2) the questions should be asked in light of the particular cultural milieu and the findings related to that milieu; (3) the apperception mass of each informant should be considered in light of the information supplied by him; (4) simple and concise wording within easy grasp of the least intelligent persons included in the study should be used; (5) questions and statements must be designed so as to eliminate antagonism, suspicion, or resentment; (6) the questionnaires and schedules should be interesting and important enough to the informants to justify the time spent; (7) a maximum of checking and underscoring of items and a minimum of estimates, impressions, and opinions should be included; and (8) the data sought should be grouped in clear and logical order and arranged attractively.—D. G. Ryans (Cooperative Test Service).

[See also abstracts 117, 180, 219, 240, 324, 334, 440, 492, 513, 523, 571, 590, 611.]

CRIME AND DELINQUENCY

422. Bartlett, F. C. A psychologist looks at crime. *Police J., Lond.*, 1940, 13, 53-60.—The fundamental condition of all crime and of all insanity is that the individual cannot, or will not,

adapt himself to the demands of the social group which has authority. There is an astonishingly consistent connection between a criminal career and certain mental and physical characters. These characters develop early, so that most criminals are young criminals. Insanity and criminality are largely a matter of human breeding. Very little can be done by educative and remedial measures. The only real chance of preventing crime and insanity is to organize research into early remedial training and into inborn characters of the human constitution. The success of even this chance is uncertain.—G. S. Speer (Central YMCA College).

423. Eberhart, J. C. The use of pictures in the estimation of the seriousness of property offenses. *J. genet. Psychol.*, 1940, 56, 411-437.—In a study of boys' attitudes towards property offenses, 20 such offenses had been presented verbally in 190 paired-comparison items to boys in grades V-XII inclusive. Because such a procedure was impossible in grades I and III, 15 offenses were selected and presented as line drawings in a paired-comparison series (105 pairs). Both forms were submitted to a group of 36 12-year-olds and a group of 54 fifth graders. Results suggested essential similarity of estimation in the 2 forms, but discrepancies indicated that the tests were not completely equivalent. Administration of the pictorial form to 56 first-grade and 43 third-grade boys yielded a greater range for the latter group when Thurstone scale values were computed, because of greater agreement within the group.—D. K. Spelt (Mississippi).

424. Feinberg, H., & Reed, C. L. Reading level of a group of socially maladjusted boys. *J. soc. Psychol.*, 1940, 12, 31-38.—The Monroe Standardized Silent Reading Test was given to 143 boys at the Ford Republic, a school for boy delinquents between the ages of 12 and 17. Results showed that reading ratio correlated .81 with comprehension, .50 with grade placement, .61 with M.A. Comprehension correlated .65 with placement and .68 with M.A. "There is . . . sufficient evidence to suggest that many of these boys are meeting continuous defeat in school due to reading difficulties, which leads them to look for success in spheres less socially acceptable."—G. Brighthouse (Occidental).

425. Fontaine-Vincent, C. La conception psychanalytique de la criminalité. (The psychoanalytic concept of criminality.) *Rev. Droit pén.*, 1939, 19, 874-891.—[Abstracted review; original not seen.] The aims of psychoanalysis regarding the understanding and treatment of criminals are discussed. Only far-reaching social changes will permit these aims to be translated into reality and punishment to be replaced by therapeutic and preventive measures.—H. L. Ansbacher (Brown).

426. Hart, B. D. The defective delinquent. *Amer. J. ment. Def.*, 1940, 45, 84-88.—In 1933 Illinois made provision for the segregation of defective delinquents; 86 male patients were transferred from the state institution for mental defectives to the new Security Hospital. Failures of

adjustment in the institution made by these 86 prior to transfer consisted of repeated attempts at escape, police history during periods of escape or parole, persistent sex offenses, and in general uncooperative, defiant, and combative behavior. 50 of these boys previously had been confined to other institutions. The average I.Q. of the group was 65 and the average age at transfer to the Security Hospital was 20 years. Follow-up since transfer to determine whether criteria of selection had been adequate indicated that in not a single case was grave injustice done to the boy by the transfer. 75 of the 86 are still in the Security Hospital.—M. W. Kuensel (Children's Home, Cincinnati).

427. Morrish, R. Criminals I have met. *Police J., Lond.*, 1940, 13, 349-356.—The author believes that many criminals possess personality traits which impel them to crime, and also to particular patterns of criminal behavior. Except for youthful offenders, many of whom reform, very few criminals ever permanently reform or change their specific type of criminal activity. Criminals who commit crimes of violence frequently develop a face contour which expresses their true character, and may be recognized by experienced police officers. Swindlers and similar criminals give every appearance of being normal citizens. Numerous anecdotes from the author's personal experiences illustrate his beliefs.—G. S. Speer (Central YMCA College).

428. Tavares de Almeida, A. Aspectos da criminalidade sexual no sertão paulista. (Aspects of sexual crimes in the rural districts of Sao Paulo.) *Rev. Neurol. Psiquiat. S. Paulo*, 1940, 6, 105.—Abstract.

429. Vergani, O. [The dynamics of the crime reaction in young offenders.] *Rass. Studi Psichiat.*, 1939, 28, 67 ff.

[See also abstract 278.]

INDUSTRIAL AND PERSONNEL PROBLEMS

430. Abel, T. M. A study of a group of subnormal girls successfully adjusted in industry and the community. *Amer. J. ment. Def.*, 1940, 45, 66-72.—84 girls from the Manhattan High School for Women's Garment Trades who left school at 17 years and whose average Otis and Pintner Non-Language Test I.Q.'s were 66 and 83 respectively were followed up over a period of 3.5 years. 55% were steadily employed. Factors contributing to their success were stable homes, ambition and self respect, careful job placement, encouragement and patient treatment during the initial work period, and luck in securing an adequate first job. When workers attained success during their first year then they usually remained as steady and good workers. They were willing to stick to routine monotonous jobs and had no aspirations to advance their positions. Besides they felt attached to their place of work and became identified with it.—M. W. Kuensel (Children's Home, Cincinnati).

431. Bartlett, E. D. Aptitude tests and the selection of office workers. *Off. Mgmt Ser., Amer. Mgmt*

- Ass., 1938, No. 84, 4-12.—Practical advantages and precautionary measures regarding tests used by the Atlantic Refining Company are discussed. The importance of the clinical approach is emphasized. Whenever unsupported test scores differ with supervisory opinion, deference to the latter is advocated. Tests save time, contribute to more accurate promotion, and are an aid in guiding employees.—*A. M. Kershner* (Maryland).
432. Bartlett, K. G., & Miller, D. W. Occupations in radio. *Occup. Monogr.*, 1940, No. 12. Pp. 48.
433. Baumgarten-Tramer, F. Die Arbeit des Menschen. (Man's work.) (Rev. ed.) Burgdorf, Switzerland: Baumgartner, 1940. Pp. 72. Fr. 3.50.—The author discusses briefly the attitudes towards work at different times and the scientific concept of work. Activity, to be considered work, must be (1) organized, (2) persistent, and (3) directed towards the achievement of material or ideal ends. Work may be primarily mental or primarily physical, but never is exclusively one or the other. The personal factors involved in achievement include: health, ability, energy, character traits, willingness, and attitudes; social factors are competition and morale. Several personnel problems are included in work, such as fatigue, fluctuation of efficiency, the length of the working day, working conditions, and wage systems. Efficient work must (1) show maximum production, (2) require least possible energy expenditure, (3) give greatest possible amount of satisfaction to the worker, and (4) strengthen his social consciousness. Rules for promoting efficiency are appended. (See XIV: 2055.)—*H. Beaumont* (Kentucky).
434. Blum, M. L. A contribution to manual aptitude measurement in industry. *J. appl. Psychol.*, 1940, 24, 381-416.—A study was made of the relationship of the O'Connor finger and tweezer dexterity tests and the success of workers in a watch factory. Performance on the tests was expressed in terms of time score, rate of improvement, and ratings on quality of performance. Only the first and third measures yielded useful predictions of job success.—*E. E. Ghiselli* (California).
435. Brown, L. O. Market research and analysis. New York: Ronald Press, 1937. Pp. 466. \$4.00.
436. Brundage, E. G., & Tiffin, J. A portable apparatus for the analysis of time and motion in industrial operation and other motor skills. *Psychol. Bull.*, 1940, 37, 569.—Abstract.
437. Burmeister, H. Untersuchungen über Änderungen der optischen Reaktionszeit des Menschen beim Einwirken hoher Fliehkräfte. (Changes in the human visual reaction time under the influence of great centrifugal forces.) *Luftfahrtmedizin*, 1939, 3, 277-284.—[Abstracted review; original not seen.] Subjects on a centrifuge seem to lose control over their actions and show disturbances of reaction speed and thought processes. The effect of the forces is stronger in vertical than in horizontal direction. Disturbances are caused mainly by disturbances of the blood circulation in the brain.—*H. L. Ansbacher* (Brown).
438. Carmichael, L. The national roster of scientific and specialized personnel. *Science*, 1940, 92, 135-137.
439. Cioch, R. [Increased excitability of the vestibular mechanism of aviation personnel.] *Polsk. Przegl. Med. lotn.*, 1939, 8, 40-45.—[Abstracted review; original not seen.] The vestibular mechanism is particularly important for the aviator when, owing to the increased sensitivity of the vegetative system, such symptoms as vertigo, vomiting, sweat eruptions, etc. appear. 4 groups are differentiated: (1) those who show temporary light disturbances and increased reactivity of the vestibular mechanism caused by fatigue; (2) combat pilots at the beginning of their training in aerial acrobatics who should benefit most by permanent treatment of the vestibular system; (3) men with gastric disturbances who should be employed elsewhere if initial treatments show no results; (4) men with organic diseases of the central nervous system in whom vegetative disturbances are to be regarded as precursors of the main disease and who should be excluded from flight. French and English summaries.—*H. L. Ansbacher* (Brown).
440. Cole, R. J. A survey of employee attitudes. *Publ. Opin. Quart.*, 1940, 4, 497-506.—By means of the poll method a survey is made of Philadelphia industrial workers in regard to their attitudes concerning their jobs, employers, and company policies. The possibility of using this method to determine what might be done to improve employee-employer relations is pointed out.—*K. B. Breland* (Minnesota).
441. DeSilva, H. R., Robinson, P., & Frisbee, W. H. Driver license examination procedure. Washington, D. C.: American Association of Motor Vehicle Administrators, 1940. Pp. 91.—An examiners manual, a description of duties of the supervising examiner, and a treatment of administrative problems are presented. The general approach is that of standardizing the driver license procedure to include visual, law, road, road sign, and hearing tests, and special examinations for cases with physical and mental deficiencies.—*T. W. Forbes* (Yale Bureau for Traffic Research).
442. Dickson, W. J. Employee education and counseling programs. *Person. Ser., Amer. Mgmt. Ass.*, 1938, No. 35, 4-19.—4 illustrations of employee misinformation are given. The personnel counseling program at the Hawthorne Plant of the Western Electric Company is described with respect to the interviewing technique, the attitude of the interviewer, and the underlying assumptions involved in the program.—*A. M. Kershner* (Maryland).
443. Dorcus, R. M. Methods of evaluating the efficiency of door-to-door salesmen of bakery products. *Psychol. Bull.*, 1940, 37, 588.—Abstract.
444. Ferree, C. E., & Rand, G. Work and its illumination. II. *Person. J.*, 1940, 19, 93-98.—

Glare comes at lower intensities for Mazda light than daylight due to the yellow color and the relatively poor diffusion of the Mazda light. Direction of light is the best method of controlling glare in local lighting. Simple glare is a too high brightness. Most people find comfortable reading somewhere between 10 and 40 ft.-c. Evenness of illumination is not as important as was once believed. Mixtures of day and artificial light, instead of being undesirable as some have thought, is more satisfactory than all artificial light. The eye becomes so slowly adapted that it takes more light in the late afternoon than at night. Best results are obtained with mat or flat ink on mat paper. Black ink on white paper is preferable to any colored paper. Of the colored, yellow gives best results. Unsaturated and light shades are better than saturated and dark shades. In addition to color of paper, its reflection factor, gloss, hardness and opacity should be considered.—*M. B. Mitchell* (Independence State Hospital, Iowa).

445. Giberson, L. G. Dealing with emotional problems in the office. *Off. Mgmt Ser., Amer. Mgmt Ass.*, 1939, No. 87, 22-28.—The 20% of all employees which contribute the bulk of management problems may be divided into 2 groups. In the first disturbances may be caused by physiological factors (high blood pressure, alcoholism, presenility, syphilis, post-encephalitis). The second, composed of psychoneurotics, paranoids, etc., may be termed the emotionally maladjusted. Suggestions are given on how to deal with the problems.—*A. M. Kershner* (Maryland).

446. Grandpierre, R. Les effets physiologiques du vol en avion aux hautes altitudes. (The physiological effects of airplane flight in high altitudes.) *Rev. Physiothér. chir.*, 1939, 15, 49-73.—[Abstracted review; original not seen.] A survey of the various factors effecting the aviator.—*H. L. Ansbacher* (Brown).

447. Harrell, W., & Faubion, R. Correlations between 'primary mental abilities' and aviation maintenance courses. *Psychol. Bull.*, 1940, 37, 578.—Abstract.

448. Hayes, R. D. How to teach foremen to teach. *Person. Ser., Amer. Mgmt Ass.*, 1940, No. 42, 20-28.—Because the attitude of the worker of today differs from that of the worker of former years, it is necessary to instruct foremen in job training. Three methods are described and evaluated according to the success achieved at the American Rolling Mills Company. Examples are presented to demonstrate the success of one of these methods.—*A. M. Kershner* (Maryland).

449. Hazelhurst, J. H. A factorial analysis of measures of mechanical aptitude. *Psychol. Bull.*, 1940, 37, 578.—Abstract.

450. Hsiao, H. H. [How to improve the efficiency of military training.] *Educ. Rev.* (Chinese), 1938, 28, No. 3, 9-17.—Selection of recruits is considered as a prerequisite of military training. After reviewing the work of American psychologists

in the First World War, the author presents his own intelligence examination of military officers, which consists of 4 tests, (1) maze, (2) completion (of drawings) by analogy, (3) arrangement of geometrical figures, and (4) multi-adaptation. This examination has two forms, A and B, and may be administered to groups of 150 persons in about 30 mins. The results obtained from testing 584 persons showed that all tests had a reliability coefficient over .90; the total scores of Form A and Form B correlated with the scholarship records of military courses with coefficients of 0.52 and 0.50 respectively; the two forms intercorrelated with a coefficient of 0.80; and the frequency distribution of the test scores approximated the normal distribution. Lastly, the importance of military psychotechnics in military affairs is pointed out.—*C. F. Wu* (Academia Sinica).

451. Kaczanowski, G. [Enuresis in soldiers.] *Lek. wojsk.*, 1939, 33, 90-93.—[Abstracted review; original not seen.] Measurements of bladder pressure are recommended to determine cases of malingerers. German summary.—*H. L. Ansbacher* (Brown).

452. Kao, C. F. [Mobilization of Chinese psychologists.] *Eastern Misc.* (Chinese), 1938, 35, No. 13, 5-11.—A plea for the mobilization of Chinese psychologists to participate in the war of resistance against the Japanese aggression, with the fields of their activities outlined.—*C. F. Wu* (Academia Sinica).

453. Karlake, J. S. The Purdue eye-camera: a practical apparatus for studying the attention value of advertisements. *J. appl. Psychol.*, 1940, 24, 417-440.—A reliable method for photographing eye movements is described, which permits the use of a wide variety of material with unrestricted vision, the placement of the material at the distance of most distinct vision for the reader, and which permits the reader to leaf through the material. The use of the method is illustrated with magazine advertisements.—*E. E. Ghiselli* (California).

454. Keyser, G. W. [Color vision tests of the permanent medical commission of the navy.] *Norsk Tidsskr. milit. Med.*, 1939, 43, 53-55.—[Abstracted review; original not seen.] Since 1928 tests for color vision have been applied to sailors. The author suggests that these tests should be applied less strictly to those who are already members of the service, since practically no naval accidents are known which could be attributed to defective color vision. With new applicants greater strictness is appropriate. German summary.—*H. L. Ansbacher* (Brown).

455. Lindsay, M. F. M. Consumers' preference and planning. *Yenching J. soc. Stud.*, 1939, 1, 192-210.—A theoretical discussion of the divergence between consumer's preference (expressed in money) and real wants, and a brief sketch of the ways in which planning, in the sense of interference with a system of free markets, is necessary to satisfy the real wants of the consumer.—*C. F. Wu* (Academia Sinica).

456. Mercer, M. An analysis of the factors of scientific aptitude as indicated by success in engineering curricula. *Penn. St. Coll. Stud. Educ.*, 1940, No. 22, 47-48.—Abstract.
457. Ohm, J. [Familial occurrence of nystagmus in coal miners.] *v. Graefes Arch. Ophthalm.*, 1940, 141, 20-31.—[Abstracted review; original not seen.] Heredity played a part in 12% of 2400 patients with miner's nystagmus.—D. J. Shaad (Lawrence, Kansas).
458. Roberts, E. B. Tests to determine objectively the effectiveness of an industrial relations program. *Off. Mgmt Ser., Amer. Mgmt Ass.*, 1938, No. 84, 32-37.—Industrial expansion has given rise to problems in two way communication between management and the worker. After giving mass-interviews, an audit of the employee morale of 2500 employees was made. Results pointed to the necessity of more careful promotion, watching out for favoritism, effectively informing employees, re-studying definitions of jobs, positions, and organization lines, and not neglecting the workers' desires for psychological as well as material satisfactions.—A. M. Kershner (Maryland).
459. Robinson, O. P. Retail personnel relations. New York: Prentice-Hall, 1940. Pp. 586. \$4.00.—A practical manual and textbook on retail personnel problems, procedures, and operations.—(Courtesy Publishers' Weekly).
460. Ruff, S., & Strughold, S. Grundriss der Luftfahrtmedizin. (The basis of aviation medicine.) Leipzig: Barth, 1939. Pp. vii + 191.—[Abstracted review; original not seen.] This book comprises 6 chapters of which only the last 3 are of interest for the psychologist. These consider the psychophysiology of aviation, especially sensory physiology, the reasons for accidents in aviation, and a review of the comparative physiology of flying.—F. A. Mote, Jr. (Connecticut).
461. Schaffer, V. G. Leadership training in industry. *Psychol. Bull.*, 1940, 37, 573.—Abstract.
462. Schultz, R. S. Preliminary study of an industrial revision of the revised Minnesota Paper Form Board Test. *J. appl. Psychol.*, 1940, 24, 463-467.—A simplified revision of the Minnesota Paper Form Board Test is described. Although the new and old forms of the test are highly correlated, the new form yields slightly higher scores.—E. E. Ghiselli (California).
463. Schultz, R. S. Personnel selection in aviation industry. *Person. J.*, 1940, 19, 99-105.—All employees and applicants were given extensive examinations. Personality as well as technical ability is necessary for supervisory positions. Engineers with creative ability who can actually do the work as well as plan it were found desirable. Re-assignments can be made on the basis of tests. New employees assigned according to tests, have for the most part proved average or good.—M. B. Mitchell (Independence State Hospital, Iowa).
464. Sillevaerts, —. La selection des pilotes à la lumière des données de médecine et de psychologie aéronautiques. (Pilot selection in the light of the findings of aviation medicine and psychology.) *Bull. int. Serv. Santé Armées*, 1939, 12, 219-233.—[Abstracted review; original not seen.] A history and survey of aviation medicine and psychology of the past 20 years are presented. Practical flying experience is essential for research in the field. The foundation of an international information office for problems of aviation medicine is proposed.—H. L. Ansbacher (Brown).
465. Simoneit, M. Der Psychiater auf der Psychologischen Prüfstelle. Erwiderung auf den gleichbenannten Aufsatz von Oberstabsarzt Dr. Tiling, Berlin. (The psychiatrist at the psychological testing station. A reply to a paper of the same title by Surgeon Major Dr. Tiling, Berlin.) *Dtsch. Militärarzt*, 1939, 4, 201-205.—[Abstracted review; original not seen.] This is part of a controversy as to whether the ultimate judgment of the candidate for an officer's commission should be left to the psychologist or the psychiatrist. The author makes the point that the candidates do not want to be considered ill and show less inhibition toward the psychologist. (See XV: 468.)—H. L. Ansbacher (Brown).
466. Starkiewicz, W. [The influence of fatigue on the performance capacity of the visual organs of the aviation personnel.] *Polsk. Przegl. Med. lotn.*, 1939, 8, 56-64.—[Abstracted review; original not seen.] The visual organs being subject to greater strain than under normal conditions it is important to determine overstrain of the eye by special methods in order to maintain flight safety and efficiency of the personnel. French summary.—H. L. Ansbacher (Brown).
467. Strughold, H. Die biologische Höhenwirkung vom Standpunkte der Luftfahrt. (The biological influence of altitude from the point of view of aviation.) *Wien klin. Wschr.*, 1939, 52, Part 2, 857-860.—[Abstracted review; original not seen.] Next to the lowering of atmospheric pressure and temperature, oxygen lack represents the chief danger. 4 thresholds for various effects are differentiated at various altitudes: reaction threshold at 2000-3000 m.; disturbance threshold at 4000 m.; critical threshold at 6000-7000 m.; and lethal threshold for which no value is stated. The disturbances manifest themselves in many ways including weak judgment, sluggish thought, depression or euphoria, and change in handwriting. Artificial oxygen supply is recommended below the disturbance threshold of 4000 m. In case of interruption of the artificial supply the sudden lack of oxygen is bearable only for fractions of a minute, the so-called time reserve.—H. L. Ansbacher (Brown).
468. Tiling, E. Der Psychiater auf der Psychologischen Prüfstelle. Schlusswort zu der vorstehenden Erwiderung von Oberregierungsrat Dr. Simoneit auf den gleichnamigen Aufsatz. (The psychiatrist at the psychological testing station. Final statement on the reply by Oberregierungsrat Dr. Simoneit to a paper of the same title.) *Dtsch. Militärarzt*, 1939, 4, 205-206.—[Abstracted review; original

not seen.] The author states that he has always found that it is easier for the psychiatrist to establish rapport than for the psychologist. The author's aim is to facilitate co-operation between the psychologist and the psychiatrist. (See XV: 465.)—*H. L. Ansbacher* (Brown).

469. Velhagen, K. [The question of normal color sense in street traffic.] *Klin. Mbl. Augenheilk.*, 1940, 104, 377 ff.—[Abstracted review; original not seen.] Standardized placement of colors on traffic signals is suggested to allow recognition by drivers whose color sense is defective.—*D. J. Shaad* (Lawrence, Kansas).

470. Viteles, M. S. The application of psychology in industrial relations. *Person. Ser., Amer. Mgmt. Ass.*, 1938, No. 35, 23-36.—Possible alleviation of present industrial strife by scientific study of selection, training, re-training and transfer, motivation, and attitudes is discussed in the light of the author's experience in this country and in Europe.—*A. M. Kershner* (Maryland).

471. Watkins, J. W. The relative importance of containers and labels in determining consumers' preferences for several brands of tomato catsup. *J. appl. Psychol.*, 1940, 24, 505-516.—Customers in a grocery store were asked to express their opinions concerning the general attractiveness of 5 different bottled brands of tomato catsup and the attractiveness of the bottle shape, the label, and the cap of each. The results indicated that the label is the most important factor in the determination of general attractiveness, but that its importance varies with different brands.—*E. E. Ghiselli* (California).

472. Zinn, C. F. Construction of comprehensive trade tests for relief printing. *Penn. St. Coll. Stud. Educ.*, 1940, No. 22, 69-70.—Abstract.

[See also abstracts 252, 259, 307.]

EDUCATIONAL PSYCHOLOGY

(incl. Vocational Guidance)

473. Ai, W. [A study of childrens' interest in reading.] *Stud. educ. Psychol. Teach. Coll., Nat. Central Univ.*, 1940, 1, No. 1, 53-69.—In one experiment, 9 elementary school pupils were given 16 lessons in literary Chinese for a whole term along with their regular lessons in spoken Chinese, and their interest in reading was tested. In another experiment, 26 elementary school pupils were required to rate 20 lessons in literary Chinese, selected and reprinted from 3 primary readers, according to their interest in reading. The results showed that the reading interest of these children was much like that of the American children, irrespective of the difference in reading matter. Their interest in reading is determined by the characteristic feature (or content) of the matter concerned. The characteristic features of the reading matter may be classified into 13 main categories, (1) surprise, (2) liveliness, (3) animal narration, (4) conversation, (5) humor, (6) plot, (7) man, (8) woman, (9) child, (10)

adult, (11) static narration, (12) knowledge instruction, and (13) moralness. These children were most interested in the first 9 categories or in combinations of any 2 or 3 of them, and were least interested in the last 4 categories or in combinations of any 2 or 3 of them. They did not show any particular interest in verse form, and the degree of difficulty or ease of the reading matter did not influence their interest in reading.—*C. F. Wu* (Academia Sinica).

474. Ai, W. [Are all curves of distribution of school ability normal?] *Teach. Learn. Mon.*, 1939, 3, No. 10, 15-20.—Curves were fitted to data obtained from (1) measurement of Chinese characters (scores for knowing both sound and meaning, for knowing sound) but not meaning, and for knowing meaning but not sound) in students from elementary-school grade VA to senior high-school class IIIB inclusive, (2) measurement of the classical or literary Chinese and the vulgar or spoken Chinese (scores for comprehension and speed) in junior and senior high school students, (3) measurement of spoken Chinese (scores for comprehension, speed, and silent reading) in 550 elementary school graduates participating junior high school entrance examinations, and (4) measurement of English ability (scores for comprehension and speed) in college freshmen. The results reveal that the distribution of school ability is not always normal, as generally assumed by students of educational measurement. The author warns against the bias of the so-called normal curve distribution of school achievements. 6 tables and 5 figs. (curve fitting).—*C. F. Wu* (Academia Sinica).

475. Ai, W., Ting, T. Y., & Kuo, T. C. [An attempt at the construction of a test of the sequence of Chinese language.] *Stud. educ. Psychol. Teach. Coll., Nat. Central Univ.*, 1940, 1, No. 1, 70-87.—The present test is designed to measure the ability of school children in discrimination and rearrangement of the sequential order of Chinese characters in a phrase or sentence and consequently their attainment in Chinese language. Ten varieties of 150 phrases containing 5, 6, 7, 8, 9, or 10 characters respectively were selected from a number of current primary readers and divided into 3 sections: 3 varieties of equal difficulty, 35 mins., covering the elementary school grades VIB, VIA, VB, and VA; 3 varieties of equal difficulty, 40 mins., covering grades IVB, IVA, and IIIB; and 4 varieties of equal difficulty, 40 mins., covering grades IIIA, IIB, and IIA. These phrases with their individual characters in disorder were printed in vertical rows and in groups of 10 phrases. The second variety of all 3 sections has been administered to 4329 pupils from 11 elementary schools. The coefficients of reliability (intercorrelations between every 2 kinds of phrases of varying length) were found to range from 0.65 to 0.98, most of them being around 0.90.—*C. F. Wu* (Academia Sinica).

476. Ault, J. W. Selection as a factor in teacher education. *Sch. & Soc.*, 1940, 52, 309-312.—It is often claimed that students in teacher education

institutions are inferior to those in liberal arts colleges. A comparison of grade point averages of students in these two branches of the San Diego State College during 1934-1939 shows little difference except for the men specializing in physical education. The low ability of the latter constitutes a serious problem which should be of interest to educators.—*M. Lee* (Chicago, Ill.).

477. Bailey, R. J. State certification of school counselors. *Occupations*, 1940, 19, 94-98.—A summary of the state certification requirements for school counselors. 39 states have no special requirements. The difficulties involved in setting up specific requirements are discussed.—*H. Schlosberg* (Brown).

478. Baruch, D. W. Therapeutic procedures as part of the educative process. *Psychol. Bull.*, 1940, 37, 585.—Abstract.

✓479. Bedell, R. A comparison between self-estimated and measured vocational interests. *Psychol. Bull.*, 1940, 37, 582.—Abstract.

480. Bell, R. Notes on child development and education. *J. educ. Sociol.*, 1940, 14, 110-125.—Certain theses believed to be significant for education today are grouped under (1) considerations relating to growth and development, and (2) considerations relating to learning.—*D. G. Ryans* (Cooperative Test Service).

481. Bird, L. E. A study of certain visual characteristics of high and low achievers in reading. *Penn. St. Coll. Stud. Educ.*, 1940, No. 22, 9-10.—Abstract.

482. Bliss, E. F., Jr. Standardized tests and educational practice. Brooklyn, N. Y.: Author, P.O. Box 267, 1940. Pp. 29. \$0.75.—This monograph discusses in legal phraseology some of the possible considerations involved in setting up regulations applying to the use of standardized tests in public educational systems. Also considered are the economic aspects of the selection and purchase of tests and the authority for administration of them.—*D. B. Lindsley* (Brown).

483. Broom, M. E. The reliability of the reading graph yielded by the Ophthalmograph. *Sch. & Soc.*, 1940, 52, 205-208.—The test was given in two schools to pupils in grades IV-VI and repeated 1-5 days later. The reliability coefficients obtained were high enough to justify the use of the tests of fixation, regression, and reading speed in a group survey but not for testing individuals for which they were designed. The comprehension test has no significance in measuring comprehension but its purpose is admittedly only to motivate the reading performance.—*M. Lee* (Chicago, Ill.).

484. Buswell, G. T. The interpretation of research in educational psychology. *Sch. & Soc.*, 1940, 52, 219-224.—Research data are often unwarrantedly used as a basis for educational recommendations. Several illustrations of this are given. The recent report of the American Council on Educational Research advocates more critical examination. The author feels that, lacking any clear

cut technique for doing this, such examination may lead to endless futile discussions. It would be better to regard minor assumptions as hypotheses to be verified by research and to limit interpretation to the implications of the data at hand.—*M. Lee* (Chicago, Ill.).

485. Carr, E. J. A factor analysis of a vocational guidance test battery. *Penn. St. Coll. Stud. Educ.*, 1940, No. 22, 15-16.—Abstract.

486. Carroll, J. B. Knowledge of English roots and affixes as related to vocabulary and Latin study. *J. educ. Res.*, 1940, 34, 102-111.—The author describes the development of the Morpheme Recognition Test for testing the knowledge of the smallest meaningful phonetic units in language. Small samples and the instructions of the test are given in the text. Two forms have been developed and one or the other was given to 270 students at the University of Minnesota. Data were also collected for the Seashore and Eckerson English Recognition Vocabulary Test, a revised Alpha Examination and the number of years of Latin study in secondary school and college. A statistical treatment of the results indicates (1) that the Morpheme Recognition Test has a corrected reliability of .893 and (2) that it correlates with the Seashore-Eckerson Vocabulary test .427, with the Revised Alpha Examination .251, and with participation or non-participation in Latin study .489. The results show that the study of Latin influences morpheme knowledge but not vocabulary.—*S. W. Fernberger* (Pennsylvania).

487. Chen, H. S., & Liang, S. C. [New educational tests and statistics.] Shanghai: Child Book Co., 1937. Pp. 342. \$0.80 Mex.—The topics discussed in order are: intelligence tests, group and individual; educational tests, including Chinese language, handwriting, arithmetic, natural science, history and geography, English, drawing, music, and common-sense; miscellaneous tests, including physical measurement, character and personality tests, and vocational tests; methods and procedure of administering the tests; statistics and methods of report; and methods of construction of tests, including T. B. C. F. system. At the end of each chapter, there is a list of questions.—*C. F. Wu* (Academia Sinica).

488. Chen, L. K., & Chen, Y. T. [Educational psychology.] Shanghai: Commercial Press, 1937. Pp. 245. \$1.30 Mex.—An abridgement and revision of the senior author's book bearing the same title, published in 1934 (see VIII: 6092). The present volume covers 40 chapters divided into 4 parts. Part I is an introduction on the nature of psychology. Part II discusses psychology of the child, including topics on different aspects of the physiological and psychological development, and mental hygiene of the child. Part III discusses psychology of learning, including topics on the principles, improvement, economy and guidance of learning, and adult learning. Part IV deals with psychology of the school subjects, including Chinese language, arithmetic, art and manual training.

The last chapter gives the methods of measurement of educational efficiency as a reference for the school teachers.—*C. F. Wu* (Academia Sinica).

489. Chin, S. Y., & Yin, T. C. *Shortcomings in the written English of secondary school graduates*. [China]: National Northwestern Teachers College, 1939. Pp. 50.—This monograph, as a part of the report on the teaching of English in secondary schools, gives an analysis of errors in written English (including translation of a short Chinese passage into English and the writing of a composition on one of three assigned topics) in 527 university entrance examination papers. There were altogether 8830 errors falling into 4 main classes, grammatical errors pertaining to the eight parts of speech, errors pertaining to single words, errors pertaining to phrases and sentences, and errors pertaining to mechanical details. Each class is divided into a number of sub-classes. Both the frequency and percentage of the errors of each subclass are given, and the most typical errors are cited as examples. The extent of the errors found is much larger and the frequency much higher than what can reasonably be justified, when the time devoted to English teaching (6 consecutive years of instruction for 4-8 hours a week) in the junior and senior middle schools and the standards set by the present Course of Study in English are considered. Implications as well as suggestions for the improvement of English learning and teaching are given.—*C. F. Wu* (Academia Sinica).

490. Coffey, W. C., Jr. *The mortality and academic careers of two groups of college students*. *Sch. & Soc.*, 1940, 52, 269-271.—A comparison was made of the records of two groups of college freshmen, one representing the upper 20%, the other the middle 20% of college aptitude. 29% of the high and 71.6% of the middle group did not complete their course. The percentages dropped for low scholarship were 7 and 20.7 respectively. Though academic failure is the chief cause for the high mortality in the middle group there is great overlapping in the honor point ratios of the graduating and non-graduating members of both groups. The findings indicate the need for early identification and guidance of the good scholastic risks with the hope of retaining them.—*M. Lee* (Chicago, Ill.).

491. Coleman, H. A. *The relationship of socio-economic status to the performance of junior high school students*. *J. exp. Educ.*, 1940, 9, 61-63.—Experimental evidence is presented in support of the following conclusions: (1) There is a definite relationship between socio-economic status and achievement in school subjects. (2) There is greater personality maladjustment in groups representing low socio-economic status than in groups representing average or high socio-economic status. (3) The number and kinds of hobbies are related to socio-economic status.—*H. W. Karn* (Pittsburgh).

492. Dale, E., & Vernon, N. *Propaganda analysis; an annotated bibliography*. *Bur. educ. Res. Ohio St. Univ.*, 1940, 1, No. 2. Pp. 31.—The purpose

of this bibliography is to show the effect of the recent general interest in propaganda analysis on the work of teachers throughout the country. The 65 references are chiefly from educational journals.—*H. L. Ansbacher* (Brown).

493. Davis, R. A. *The teaching problems of 1075 public school teachers*. *J. exp. Educ.*, 1940, 9, 41-60.—This study is an attempt to determine the most frequently recurring teaching problems of public-school teachers, as revealed by their written statements in reply to a questionnaire sent to representative schools in Colorado. To the author, the analyzed data and the impressions received from his reading warrant the following general conclusions: (1) The problem of making children wish to learn, although it varies in frequency of occurrence in different school levels, occupies a place of major importance among the various problems listed. (2) Inability to read with an adequate degree of facility and comprehension is a significant problem at all levels of education from the first grade through the twelfth. (3) Most schools are so overcrowded with curricular and extra-curricular activities that it is impossible to do any job well.—*H. W. Karn* (Pittsburgh).

494. Detjen, M. E. F., & Detjen, E. W. *Home room guidance programs for the junior high school years*. Boston: Houghton Mifflin, 1940. Pp. 525. \$1.90.

495. Dewey, J. *Education today*. New York: Putnam, 1940. Pp. 373. \$3.75.—This collection of 45 papers published between 1897 and 1938, and carrying a foreword by Joseph Ratner, sets forth Dewey's philosophy of education. Some of the main issues are: (1) Education is a process of living and not a preparation for future living. (2) Self-directing activity should be given ample opportunity and material for development. This self being a consequence of interacting in a social environment, not an original entity, educational experiences should be carefully and wisely selected by more mature minds. (3) Education must continue to be experimental, i.e., a thoughtful, creative reconstruction of the old in the light of the new. (4) Education must be scientific, it must make the spiritual values of science an integral part of our cultural life. Thus, intelligence would be freed and society may in the conduct of its affairs reach the intelligent development already attained in the more restricted area of scientific inquiry.—*H. Beaumont* (Kentucky).

496. Dunklin, H. T. *The prevention of failure in first grade reading*. *Teach. Coll. Contr. Educ.*, 1940, No. 802. Pp. vii + 111.—An experimental and a control group of 54 each were selected from the lowest third in each of 3 schools, as rated on a learning-to-read test. The groups were matched for scores, age, sex, and previous school experience. The experimental group was given 7 months of instruction adjusted to the individual need. The control group was taught in the usual fashion. All materials and procedures are suitable for use in the average school system. It was found that reading

failures can be prevented to an appreciable degree, but that poor attendance or uncorrected physical defects limit the effectiveness of adjusted instruction. An appendix of 49 pages describes adjusted instruction. The bibliography lists 104 titles.—*J. M. Stalnaker* (Princeton).

497. Eckert, R. G. A mental hygiene approach to speech instruction as a means to personal adjustment. *J. exp. Educ.*, 1940, 9, 23-28.—The core of the mental hygiene approach employed in this study was the conscious utilization of group therapy possibilities inherent in the speaking situation. The technique was developed by the author in order to aid in reducing tensions and to increase general facility in public speaking. Data are presented to show that a speech course employing such a mental hygiene approach can produce significant changes in adjustment as measured by a variety of personality questionnaires.—*H. W. Karn* (Pittsburgh).

498. Edwards, R. Vocational and occupational guidance. New York: Chemical Publishing Co., 1940. Pp. x + 117. \$1.50.—Vocational guidance is taken to mean guidance toward a distinct class of employment including the professions; occupational guidance is guidance for employment other than vocations. Vocational guidance must fit the person into a suitable social group as well as suitable employment. The problem is peculiar to industrialized communities. Although the process is psychological, it must operate within a social group, with many social consequences. A flexible system of training for types of occupations is of paramount importance. The State is the most suitable agent for supervision and coordination of the whole process, and for controlling all employment machinery.—*G. S. Speer* (Central YMCA College).

499. Eichel, C. G. Experiment to determine the most effective method of teaching current history. *J. exp. Educ.*, 1940, 9, 37-40.—The evidence from this study shows that the sound-film is a more effective method of teaching current history in the elementary schools than a current news periodical, even though the periodical is especially prepared for the experiment and the film is not so prepared.—*H. W. Karn* (Pittsburgh).

500. Faulkner, R. Educational research and effective art teaching. *J. exp. Educ.*, 1940, 9, 9-22.—From experimental data cited in this report the author concludes: (1) All persons have more or less ability to judge art, and there is no sharp distinction between those who can and those who cannot. (2) There is a definite relation between the ability to judge art objects and chronological age up to approximately 18. Beyond that age improvement seems to occur only along with special training. (3) There is a very low positive correlation between art judgment and tested intelligence. (4) There is a high degree of specificity in art judgment, that is, the ability to judge one field of art well does not necessarily accompany the ability to judge another field equally well. (5) Studies of the art needs of

citizens in contemporary society indicate major interest in and need for understanding of contemporary, useful manifestations of the arts. This finding is in contrast to the assumptions underlying most courses of study in art. (6) The value of any method of art instruction depends less on the method itself than on the details of how that method is used.—*H. W. Karn* (Pittsburgh).

501. Finch, F. H., & Nemzek, C. L. Attendance and achievement in secondary school. *J. educ. Res.*, 1940, 34, 119-126.—300 graduates of the University of Minnesota High School, almost equally divided between the two sexes, were studied by correlation methods to discover possible relations between absences, tardiness, achievement, and intelligence. The results indicate no relationship for boys but a correlation of .3 for girls. Bibliography of 21 titles.—*S. W. Fernberger* (Pennsylvania).

502. Freud, H., & Cheronis, N. D. Retention in the physical science survey course. *J. chem. Educ.*, 1940, 17, 289-293.—(*Educ. Abstr.* V: 1039).

503. Georgescu, I. Orientarea si selectia profesionala a invatatorului. (Selection of the teaching profession and attitudes towards it on the part of the teacher.) *J. Psihoteh.*, 1939, 3, 153-159.—A questionnaire comprised of 27 items sought to determine the kind of professional preparation and orientation of the elementary school teacher. It was published in three widely-read school magazines and also distributed in person by the author to over 300 teachers. There were only 72 returns with the results falling into three categories: (1) Very poor conditions prevail in rural elementary schools because of political corruption, inadequate teaching methods, and complete lack of libraries. (2) Teachers are generally underpaid and often forced to appeal for aid in order to buy food; hence the low morale and absence of social ideals. (3) The inferior scholastic level of normal schools and the lack of books and libraries deprive teachers of adequate preparation for the profession. An attitude of despair towards the teaching profession prevailed throughout the returns.—*S. M. Strong* (Washington, D. C.).

504. Goetsch, H. B. Parental income and college opportunities. *Teach. Coll. Contr. Educ.*, 1940, No. 795. Pp. ix + 157.—The 1023 graduates of 12 Milwaukee public high schools who made a score above the 85 state percentile on the Henmon-Nelson Test were studied. 35% were full time college students and 4% part time; 19% were in minor schools (business college, nursing schools, etc.), and 42% not in school at all. Of the 602 students not in school full time, 70% indicated that they would be if a complete scholarship could be provided. More than 3 out of 4 gave economic reasons for discontinuing their education. Scholarships were received by 9% of the boys and 16% of the girls in college. 16% had borrowed money. About half of the college students are contributing to their own support. Bibliography of 93 titles.—*J. M. Stalnaker* (Princeton).

505. Good, C. V. **Methods of research and problem solving in education.** *J. educ. Res.*, 1940, 34, 81-89.—Survey of recent developments of evaluation techniques employed in the field of education. The author discusses historical, experimental, and case methods.—S. W. Fernberger (Pennsylvania).
506. Goode, M. E. **The need of guidance.** *School*, 1940, 29, 108-111.—After briefly discussing the possible economic, social, and personality consequences of an unwise vocational choice, the author points out that the modern secondary school should be in close contact with other institutions of a complex society, should know the abilities of the child through contact and tests, and should therefore be in a position to offer sound vocational advice.—G. S. Speer (Central YMCA College).
507. Goodfellow, L. D. **The re-education of defective hearing.** *Psychol. Bull.*, 1940, 37, 575.—Abstract.
508. Hicks, N. S. **A comparison of certain formulae for determining retardation in reading.** *Penn. St. Coll. Stud. Educ.*, 1940, No. 22, 57-58.—Abstract.
509. Hiltz, J. B. **An evaluation of vision-testing methods in schools.** *Sight-Sav. Rev.*, 1939, 9, 47-52.
510. Hoff, A. G. **A study of the honesty and accuracy found in pupil checking of examination papers.** *J. educ. Res.*, 1940, 34, 127-129.—Papers were collected at the end of examinations, the responses recorded by the teachers without the knowledge of the students, and the papers checked for correctness the next day either by the student himself or by his neighbor. Three groups comprising a total of 353 students in high school classes in chemistry were employed as subjects. The results indicate that pupil checking of objective type examination papers can be done as accurately or more accurately than teacher checking if the work is controlled. On the other hand, pupils checking their own papers results in unreliable scores. The advantages of a controlled pupil check are indicated.—S. W. Fernberger (Pennsylvania).
511. Houston, V. M. **A neglected aspect of guidance.** *Sch. Exec.*, 1940, 60, 22-24.—The fact-finding of specialists is essential to guidance, but is not guidance. Teachers should be guides, but have turned over this work to specialists. Relating instruction in subject matter by the classroom teacher to the problems involved in the significant needs of the pupils would remove formal education from its present vacuum. Counseling exists only when one person seeks help of another in whose competence he has confidence. Unless teachers offer well planned instruction and are genuinely interested in their pupils, they will have little opportunity to become guides. The teacher must help the pupil to relate each subject of instruction to vocation, leisure time, and other adult needs and interests.—G. S. Speer (Central YMCA College).
512. Kandel, I. L. **The profession of teaching.** *Sch. & Soc.*, 1940, 52, 284-288.—With recent developments in education have come increased demands on teachers and a changed concept of a teacher's function. He must have a broad cultural background, command of clear fluent expression, and so complete a grasp of his particular field that he can adapt it to any pupil level. Knowledge of psychology and sociology should underlie his understanding and guidance of each pupil. The author discusses some of the many questions which arise as to preparation, selection, appointment, and promotion in view of the changed status.—M. Lee (Chicago, Ill.).
513. Kerstetter, L. M., & Sargent, J. **Re-assignment therapy in the classroom.** *Sociometry*, 1940, 3, 293-306.—Sociometric testing was conducted over a 10-month period in a fifth grade class. As far as was practical, children were seated in accordance with their preferences. It was observed that a relatively isolated sub-group of 5 boys showed a greater and greater cleavage from the whole group, becoming an introverted group. Home visits showed poor adjustment for all these children, and it was observed that the group was becoming a gang in greater and greater conflict with police and other authorities. Drastic reassignment to newly-formed study groups broke up the group. Interaction within and among the new groups altered the pattern of choices and rejections, and "this troublesome sub-group is beginning to break up under the stimulus of a new classroom and study situation and the corresponding alterations in the seating arrangement" and the effect of discussions with the parents, and other influences.—L. J. Stone (Vassar).
514. Kitson, H. D. **New tools for the vocational counselor.** *Teach. Coll. Rec.*, 1940, 42, 44-49.—A report of developments in the past two years.—J. M. Stalnaker (Princeton).
515. Knight, E. B. **Guidance for rural boys.** *Univ. Tenn. Coll. Agric. Bull.*, 1940, No. 7. Pp. 42.—(*Educ. Abstr.* V: 1027).
516. Knudson, T. A. **What the classroom teacher can do for stutterers.** *Quart. J. Speech*, 1940, 26, 207-212.—A list of 10 suggestions for teachers without special training in handling speech defectives, based on recent research in the psychology of stuttering and particularly on the author's study of the oral recitation problems of 72 stutterers and the practices of 50 teachers.—W. H. Wilke (New York University).
517. Lamb, N. **The left-handed student in the public high school.** *Univ. High Sch. J., Calif.*, 1940, 18, 113-121.—(*Educ. Abstr.* V: 956).
518. Layman, E. McC. **A comparison of the effectiveness of rural and graded school systems in meeting the needs of the mentally retarded child.** *Amer. J. ment. Def.*, 1940, 45, 89-96.—This is a study of 510 school children with IQ's ranging from 50 to 79. 75% attended small town graded schools (without special classes) and the remainder were enrolled in one-room rural schools. The rural and town groups were compared according to social and economic status, problems presented, general

adjustment, and educational achievement. Findings show the rural children to be better adjusted both socially and educationally. Factors accounting for this condition are discussed.—*M. W. Kuenzel* (Children's Home, Cincinnati).

519. *Levy, F. N.* A special counselor on education for the arts. *Occupations*, 1940, 19, 114-116.—Largely by means of interviews the Art Education Institute aids young and old in selecting appropriate schools for the study of art. This paper lists some 80 occupations allied to the arts. It also includes a report of the Scholarship Committee of the School Art League of New York City.—*H. Schlosberg* (Brown).

520. *Leibourne, G. G., & White, K.* Education and the birth rate: a social dilemma. London: Jonathan Cape Ltd., 1940. Pp. 375. 10s. 6d.—[Abstracted review; original not seen.] This is a report of two years of research, sponsored by the Population Investigation Committee, on the bearing of educational costs and influences on size of family. The history of the various types of schools which make up the complex English educational system is traced, and the point made that, since the industrial revolution, the schools have been largely used as an avenue toward social distinction and wealth and not just to satisfy a thirst for knowledge *per se*. With this motivation and the correlative costs of training for the various professions, it follows rather logically that family limitation has become a concomitant feature of the period. To check the deterring effects of educational expenses on fertility, the authors reach a conclusion which demands policies for re-orienting the public both with respect to the attractions of social climbing and the use of expensive schooling as a chief determinant of their children's future happy adjustment.—*G. C. Schwesinger* (American Museum of Natural History).

521. *Little, H. H.* The relationship between nursery school training and the intelligence and social maturity of pre-school children. *Penn. St. Coll. Stud. Educ.*, 1940, No. 22, 43-44.—Abstract.

522. *Locke, N. M.* The Student Skills Inventory: a study habits test. *J. appl. Psychol.*, 1940, 24, 493-504.—Scores on a study habits inventory were found to be related to grades received in college. Students in different colleges were found to vary in inventory score.—*E. E. Ghiselli* (California).

523. *Loop, A. S.* The nature of the relationship between education and careers of negroes living in Manhattan, 1929-1937.—*J. exp. Educ.*, 1940, 9, 95-113.—Educational training does influence the vocational careers of negroes; higher education is valuable in securing professional positions; and an inverse proportional relationship between the amount of scholastic training and domestic job placement was found. Vocational, technical, or business school background help in securing commercial positions. In industrial work and the semi-professional and professional service attendant fields, no appreciable effect of education was found. Other than educational factors influence the occupational placement

of the negro, i.e., the depression and its attendant unemployment which have affected the negro more severely than the white, racial prejudice, common beliefs regarding negro inefficiency, lack of vocational guidance, and union exclusion. The increase in government project positions does not provide an adequate solution for the absorption of negroes with higher educational training.—*H. W. Karn* (Pittsburgh).

524. *Lorge, I.* Social survey by classroom teacher. *J. educ. Sociol.*, 1940, 14, 40-43.—Teachers are urged to develop an increased understanding of their pupils through study of child development, individual differences, and the influence of the community. Many teachers are particularly deficient in their knowledge of the community from which their pupils come; community observation and study are therefore desirable and important. In an effort to aid the teacher in understanding the community, objectives are stated, planning of a survey outlined, and various suggestions offered.—*D. G. Ryans* (Cooperative Test Service).

525. *Louden, B., & Arthur, G.* An application of the Fernald method to an extreme case of reading disability. *Elem. Sch. J.*, 1940, 40, 599-606.—The writers describe a kinesthetic approach in a case of severe reading disability. Marked progress was observed in both reading and spelling as well as a substantial gain (of 20 points) in IQ as measured by the Stanford-Binet scale.—*P. A. Witty* (Northwestern).

526. *Luca, A.* Corelatia între 'inteligentă și situația școlară, precum și între diferite teste. (The correlation between intelligence and school situation as well as between different other tests.) *J. Psihotek.*, 1939, 3, 170-176.—A number of psychological tests were administered to students of the I, IV, VI, and VIII class of a lyceum during the academic years of 1937-38 and 1938-39. This study indicates the results obtained from the observations made during 1937-38. The number of students in the various classes were: I: 55, IV: 51, VI: 37, and VIII: 32. The correlations between intelligence and school situation for the respective classes were: I: 0.51, IV: 0.57, VI: 0.30, and VIII: 0.08. The correlation between intelligence and school situation decreases as age increases, although it is much easier to administer a test to the upper classes. The explanation rests on the fact that with increase in age students become less concerned with school. Many students, because of the moral atmosphere of the school situation, give a moral interpretation of certain intelligence tests by answering "true" and "not true." When familiar with the tests, however, they answer the tests of morality as it appears to them more intelligent.—*S. M. Strong* (Washington, D. C.).

527. *Ludeman, W. W.* Effect of housing on college scholarship. *Sch. & Soc.*, 1940, 52, 268-269.—The scholarship marks of students living in dormitories were compared with those living in private homes. It was found that the dormitory

students obtained B minus on the average and the outside students C plus. Possible reasons for the favorable effect on scholarship are: closer supervision of hours of study and living routine, accessibility of library, more opportunity for discussion and competition with other students, and a generally prevailing attitude favoring study and achievement.—*M. Lee* (Chicago, Ill.).

528. *Luh, T. Y. Talks on the teaching of English.* Nanking: Cheng Chung Book Co., 1937. Pp. 95. \$0.35 Mex.—Lectures reprinted in 9 chapters. The important topics are: getting rid of the misunderstandings in regard to the direct method of teaching foreign languages; methods of learning English; ways of learning English, begin with oral language, with complete sentences, and with daily-life English; and think in English while learning English.—*C. F. Wu* (Academia Sinica).

529. *Manuel, H. T. Democracy and guidance.* *Res. Bull. Texas Comm. Coord. Educ.*, 1940, No. 12. Pp. 19.—The duty of the school in the democratic state is the maximum development of the possibilities of the individual youth, preparing him to act as a productive and responsible member of his group. In this program the fact of individual differences in abilities, interests, and needs must be stressed; the standard of work required must be based on the potentialities of the specific group concerned, and not upon a vague or arbitrary concept of the norm. Experimental curricula pitched to the individual level of both college and sub-college groups have led to more satisfactory individual adjustment and achievement. Guidance programs for the future are suggested.—*F. W. Finger* (Brown).

530. *Moore, J. E. Some considerations of the significance of individual differences in reading.* *Peabody J. Educ.*, 1939, 17, 160-166.—The writer cites 15 studies which contribute to an understanding of the basic causes of individual differences in reading. Among such causes are: lack of ability to comprehend the written word, improper attitudes of pupils, visual factors, and physical development.—*N. B. Cuff* (Eastern Kentucky).

531. *Morse, H. T., & McCune G. H. Selected items for the testing of study skills.* *Nat. Coun. soc. Stud. Bull.*, 1940, No. 15. Pp. 72.—The writers present tests designed to measure the acquisition of certain skills of paramount importance in the years of high school study. Each item included in the bulletin has been found sufficiently valid to discriminate between the first and fourth quartiles of the group used for standardization. The material is divided into 23 sections, including exercise on acquisition of data, bibliographical form, use of common references, interpretation of tabular data, evaluation of sources, critical evaluation, insight into the relative significance of questions, and recognition and interpretation of trends revealed in statistical data.—*F. W. Finger* (Brown).

532. *Nemzek, C. L. The value of certain non-intellectual factors for direct and differential prediction of academic success.* *J. soc. Psychol.*, 1940, 12,

21-30.—Data on 59 boys and 165 girls who had graduated from University High School, University of Minnesota, showed that C.A. at entrance to elementary school, extent of education of the father, extent of education of the mother, and occupational status of the father have negligible value for purposes of direct and differential prediction of academic success as measured by honor point averages.—*G. Brighthouse* (Occidental).

533. *Nemzek, C. L., & Finch, F. H. The relationship of secondary school achievement to number of schools previously attended.* *J. soc. Psychol.*, 1940, 12, 115-120.—The number of schools previously attended bears no significant relationship to high school achievement as measured by honor point averages.—*G. Brighthouse* (Occidental).

534. *Nemzek, C. L., & Nancarrow, R. J. Influence of summer-school attendance upon the achievement of intermediate-school pupils.* *Sch. & Soc.*, 1940, 52, 340-344.—It is often claimed that summer-school, because of its short condensed program and poorer work quality is not the equivalent of regular school sessions. If this is true it should have a detrimental effect on subsequent school marks. In the present study grades before, during, and after summer school were compared for those students who attended the summer session for the purpose of promotion. The means of marks during the summer session were higher than those before and after and the means of marks before were higher than those after. This is interpreted as indicating a lowering of standards in summer school, possibly on account of the inclusion of repeaters. It may be desirable to lengthen the summer session or reduce the amount of credit therefor.—*M. Lee* (Chicago, Ill.).

535. *Nugent, M. A. A home training and teaching program for mentally defective children to be taught by parents in the home.* *Amer. J. ment. Def.*, 1940, 45, 104-109.—Social workers in the Massachusetts State Division of Mental Deficiency during recent years have developed and supervise a program of home training for retarded children of mental ages below 6 years. These are the children who have been excluded from, or refused admission to, the public school and continue to live in their own homes. 3 groups of lessons have been developed: for those with mental ages under 2 years, between 2 and 4 years, and between 4 and 6 years. Improvements in adjustment in home and neighborhood and in understanding of the children's capacities and in the part of parents have resulted from the lessons. In many instances institutional placement has been postponed due to improvements in the home adjustment.—*M. W. Kuenzel* (Children's Home, Cincinnati).

536. *Odom, C. L. The stability of achievement differentials of the high-school student.* *J. exp. Educ.*, 1940, 9, 64-86.—"In general, relative performance in the same subjects appears to be fairly stable after the tenth year, so that tenth-year scores are approximately as good a basis of prediction of

twelfth-year scores as are eleventh-year scores. In the case of mathematics, language, and science scores, however, a significantly better prediction can be made in the eleventh year than in the tenth. Ninth-year scores appear to be untrustworthy for prediction of twelfth-year performance." The results suggest the possibility of guidance early in the high-school course.—*H. W. Karn* (Pittsburgh).

537. Pankaskie, M. Some factors in reading achievement at the college level. *Psychol. Bull.*, 1940, 37, 573.—Abstract.

538. Parker, W. W. Language and thinking. *Sch. & Soc.*, 1940, 52, 232-234.—The author quotes many authoritative and lay opinions from 1750 to the present to the effect that there is a close mutual association between clear thought and adequate language expression. We are warranted in assuming that language makes the higher development of thought possible and aids in the reasoning process. Teachers should not make too much allowance for ineffective expressions, because slovenly speech encourages loose thinking.—*M. Lee* (Chicago, Ill.).

539. Peppard, S. H. The slow and bright groups as seen by the mental hygienist. *High Points*, 1940, 22, 16-22.—Segregating slow and bright groups of children is highly desirable from the standpoint of the mental hygienist. Children should not be in situations which present continual failure, or constant and easy success. Segregation permits the adaptation of the curriculum to the ability of the child. Although many other factors are involved, a curriculum in keeping with the capacities and interests of the child offers the best opportunity for him to adjust to society.—*G. S. Speer* (Central YMCA College).

540. Pond, F. L. An inventory of reading experiences. *Penn. St. Coll. Stud. Educ.*, 1940, No. 22, 55-56.—Abstract.

541. Reehling, H. A. Ability to rate students on traits other than scholarship. *Penn. St. Coll. Stud. Educ.*, 1940, No. 22, 57-58.—Abstract.

542. Robinson, J. H. Some social factors involved in the vocational education and guidance of negro youth. *Wilberforce Univ. Quart.*, 1940, 1, 40-46.

543. Rodgers, E. L. Comparison of school achievement of high school pupils who had part time employment with averages of their respective groups. *J. educ. Res.*, 1940, 34, 112-126.—The amount and nature of part time employment was obtained by questionnaire from 865 boys and girls who were attending the first three classes of the Phoenix Union High School and who were engaged also in part time employment. Comparison was made with samplings of unemployed pupils of the same classes on intelligence rating, grade point averages, percentage period absences, and percentage subject failures. It was found that, although there was little difference in intelligence rating, both employed boys and girls had fewer grade points, a larger number of absences, and a larger number of failures than the unemployed. The percentage of

failures is especially great for freshman boys and girls and for sophomore girls and is actually less in the other 3 cases, thus having disappeared by the junior year.—*S. W. Fernberger* (Pennsylvania).

544. Rosander, A. C. A researcher looks at research. *Educ. Rec.*, 1940, 21, 220-236.—This is a critique of the report of a Committee on Educational Research of the American Council on Education. Having examined the role of inference in research, the contention is then denied that a new psychology would improve educational research. The complications of inference would not be simplified, and the validity of inference is unrelated to the newness or adequacy of a psychology. The statistical theory of 1940 is far beyond that of 1920, leaning particularly toward the reduction of uncertain inference. The implication of the newer type of statistics for the formulation of research projects is described.—*F. C. Paschal* (Vanderbilt).

545. Rose, F. H. Training in speech and changes in personality. *Quart. J. Speech*, 1940, 26, 193-196.—The Bernreuter scores of 291 students enrolled in speech courses in 9 colleges were taken at the beginning and end of a semester and compared with similar scores for 291 other students paired on the basis of sex, college, and semester in college. A greater decrease in neurotic tendency and a greater increase in dominance was found, but no reliable differences in self-sufficiency or sociability were obtained.—*W. H. Wilke* (New York University).

546. Roslow, S., & Weaver, G. G. Psychology for industrial teachers. New York: Hamilton, 1940. Pp. 169. \$2.00.—This is a first course in psychology for use in the training of students preparing for teaching vocational education. This text is one of the Industrial Teacher-Training Monograph Series. The volume is 8½ x 11, mimeographed, and paper bound. Each chapter is accompanied by a selected list of readings. The book is not indexed.—*W. H. Wulfeck* (Psychological Corporation).

547. Ruedisili, C. H. The relation between the subtests of the American Council Psychological Examination, high school rank, and four-year college subject grades. *Psychol. Bull.*, 1940, 37, 573.—Abstract.

548. Ryans, D. G. The professional examination of teaching candidates: a report of the first annual administration of the National Teacher Examinations. *Sch. & Soc.*, 1940, 52, 273-284.—The examinations were held in March 1940 in 23 centers for 3726 applicants. The service and the general nature of the tests are described and some of the results presented. The two largest groups of candidates were those preparing to teach English and those preparing to teach social studies in secondary schools. Those with 6-9 years experience had the highest average total scores. Men were superior to women in non-verbal reasoning and general cultural information and inferior in English mechanics and literature. In general highest scores were obtained in the field of first choice of teaching preference.—*M. Lee* (Chicago, Ill.).

549. Ryans, D. G., & Peters, E. F. An analysis and adaptation of the Bell School Inventory with respect to student adjustment in a women's college. *J. appl. Psychol.*, 1940, 24, 455-462.—With college women, it was found that the 23 most discriminating items on the Bell School Adjustment Inventory could be used to measure adjustment as adequately as the 76 in the total test.—E. E. Ghiselli (California).
550. Scheck, R. R. The use of experience units in teaching mentally deficient boys. *Amer. J. ment. Def.*, 1940, 45, 97-103.—Survey shows that but a small proportion of teachers of mentally deficient boys in residential schools use the activity method. Although a difficult method for the teacher, it is applicable to the education of mental defectives. When artfully handled its advantages nullify its disadvantages. The teaching objectives for such children are physical and social efficiency, and academic and industrial development.—M. W. Kuensel (Children's Home, Cincinnati).
551. Schorling, R. Five suggestions for improving the reading ability of slow-learning pupils. *Univ. Mich. Sch. Educ. Bull.*, 1940, 11, 125-135.—(*Educ. Abstr.* V: 1007).
552. Shen, E. [Applications of psychology to education.] *Educ. News Wkly* (Chinese), 1938, No. 7, 4-7; No. 8, 8-10.—A popular writing reviewing the applications of psychology to education in the following aspects, economy of learning and acquisition of knowledge and skill, formation and breaking of basic habits, study of individual differences, study of the abnormal behavior and delinquency, and transfer of learning. (See XV: 575).—C. F. Wu (Academia Sinica).
553. Simpkins, R. E., & Weaver, G. A. Reading problems in a negro junior college. *Quart. Rev. higher Educ. Negroes*, 1940, 8, 57-59.
554. Sisson, E. D. On Dr. Link's reply to Dr. Lyman. *Sch. & Soc.*, 1940, 52, 306-307.—Link has claimed that it is desirable for the prospective college student to have some vocational goal in mind. The author finds that only 10% of the students persist in the field of their too ambitious choice at entrance and feels that it would be better for students to enter college with an open mind. If vocational guidance had previously directed the student into a suitable course, the author would be in agreement with Link.—M. Lee (Chicago, Ill.).
555. Sloper, K. Adapting counseling to C.C.C. needs. *Occupations*, 1940, 19, 111-113.—In a controlled experiment it was demonstrated that individual counseling increased participation in the C.C.C. camp educational activities some 2½ fold. The greatest increase was found in the lowest ability groups, which had previously shown little participation.—H. Schlossberg (Brown).
556. Stevens, V. S. Vocational and educational guidance in Ontario secondary schools. *Occupations*, 1940, 19, 87-93.—A detailed summary of the results of a questionnaire on vocational and educational guidance which was sent to principals of secondary schools throughout Ontario. There is evidence of growth, but no school seems to have a complete and balanced program.—H. Schlossberg (Brown).
557. Stromberg, E. L. Methods and results of student guidance. *Proc. Okla. Acad. Sci.*, 1940, 20, 133-136.—Student guidance at the college level is a science and not an art of patient listening and giving of anecdotal advice. Counselors should be well-trained experts rather than members of the faculty who are merely willing to serve in an advisory capacity.—M. O. Wilson (Oklahoma).
558. Tireman, L. S. School problems created by the homes of foreign speaking children. *Calif. J. elem. Educ.*, 1940, 8, 234-238.—(*Educ. Abstr.* V: 1008).
559. Tolfree, A. P. The best age for treatment of children with speech defects. *J. Educ., Oxford*, 1940, 72, 451-452.—A table of ages at which treatment for various speech defects should be undertaken.—G. S. Speer (Central YMCA College).
560. Upshall, C. C. Composite faculty judgment as a predictive factor in guidance. *Psychol. Bull.*, 1940, 37, 595.—Abstract.
561. [Various.] Meeting special needs of the individual child. *Yearb. nat. elem. Prin.*, 1940, 19, 229-736.—In this 19th yearbook over 50 teachers and administrators contribute information concerning their knowledge about pupil differences and describe methods used in meeting such differences. F. S. Freeman, in Chapter I on the Challenge of the Individual Child, points out that although ready acceptance is given the fact that every child is truly unique, nevertheless this conclusion is reflected much too infrequently in the organization and procedures of schools. R. Streitz decries the frequent misuse of test data. She concludes that low interest and achievement of pupils are due largely to the fact that teachers depend almost entirely upon words for the teaching of essential facts and relationships. School subjects and activities should be integrated more closely. E. Kavin demonstrates how a broad philosophy of guidance is being applied in a community, and points out that guidance is not just a separate department to which problem children are referred but that it is concerned with the whole structure and total functioning of the school. Other chapters describe methods of meeting the individual needs of children of superior ability, of special talents, of mental retardates, of the physically handicapped, etc. A. I. Gates shows how to correct the reading difficulties of children in grades III-VIII, H. J. Baker and others analyze the needs of socioeconomically underprivileged children, and R. E. Learned tells about adjusting the transient child. In a section discussing children with personality problems C. Schmitt reviews a study of maladjusted children who were unusually susceptible to fatigue and the improvement resulting when rest and play were provided. I. Parker gives examples of personality difficulties caused by reading disabilities. The final chapter describes administrative and supervisory

practices, viz. pupil grouping, promotion, and administration of remedial instruction in speech and reading. Selected bibliographies complete each chapter.—*M. W. Kuensel* (Children's Home, Cincinnati).

562. Wise, H. S. Union speech re-education—a report of progress and problems. *Quart. J. Speech*, 1940, 26, 390-396.—A summary of progress during the past 5 years in the establishment of a curriculum for training speech clinicians in the Union of South Africa, and a discussion of the problems peculiar to this area which complicate the handling of speech disorders.—*W. H. Wilke* (New York University).

563. Wrightstone, J. W. Appraisal techniques in education. *J. educ. Sociol.*, 1940, 14, 27-32.—School curricula have been reconstructed in recent years to include more comprehensive objectives of instruction. Older emphases upon mastery of information and skills have been supplemented by newer objectives such as pupil growth in desirable attitudes, interests, appreciations, critical thinking, and creative expression. An expansion in evaluation methods has been demanded. These are summarized under the headings: academic aptitude, functional information, work and study skills, attitudes, interests, critical thinking, and personal-social adaptability.—*D. G. Ryans* (Cooperative Test Service).

564. Wu, T. C. [Psychology of learning elementary school subjects.] Changsha: Commercial Press, 1939. Pp. 156 + x. \$0.90 Mex.—The material of this book is largely drawn from Cole's writing on the psychology of common branches, supplemented with experimental data obtained from Chinese elementary schools. Following an introduction on the meaning of the essential elements of learning, a chapter is devoted to each of the following subjects: Chinese language (incl. reading, composition and handwriting), arithmetic, social science, natural history, physical education, arts, manual training, and music. A comparative diagram of the elementary education of the various nations is appended.—*C. F. Wu* (Academia Sinica).

[See also abstracts 44, 113, 114, 124, 336, 353, 424, 567, 572, 587.]

MENTAL TESTS

565. Bedell, R. Scoring weighted multiple keyed tests on the IBM counting sorter. *Psychometrika*, 1940, 5, 195-201.—Tests or personal inventories with differential item response weights may be scored by means of punch card equipment. Detailed instructions are given for preparing the cards and scoring the forms. The scoring speed is approximately four to eight times that attained by manual scoring.—(Courtesy *Psychometrika*).

566. Hsiao, H. H. [The construction and application of an intelligence test for use in elementary school entrance examinations.] *Educ. News Wkly* (Chinese), 1938, No. 3, 8-11.—A review of the principles of construction, the material used, and

the procedure of administration of the test is first given. The 4 tests adopted are: correction (drawings of 12 common objects), discrimination by matching (drawings of 5 common objects), copying by imitation (12 diagrams), and discrimination of the position of cross signs by memory (5 similar diagrams). Data obtained from 855 elementary school pupils in Nanking showed that by random sampling method the scholarship records of the 194 pupils correlated positively with the scores of the 4 tests (the coefficients being all around 0.42), regardless of the age factor. The weighted scores of the 4 tests correlated 0.64 with the scholarship records, irrespective of the age influence, indicating that these tests were reliable. A comparison of the intelligence of the grade I pupils of Nanking elementary schools as measured by this test and the standard deviations of the test scores are given for the future use of interpretation. (See XV: 575.)—*C. F. Wu* (Academia Sinica).

567. Hsiao, H. H. [The construction and application of an intelligence test for use in university entrance examinations.] *Educ. News Wkly* (Chinese), 1938, No. 17, 2-8.—A university entrance intelligence examination has been constructed on the basis of Thurstone's 1922 version, supplemented with other testing material. The test is of self-recording nature, the time limit being 30 mins., and has been standardized on the results of 2152 college freshmen-applicants. The scores obtained from this intelligence test were correlated with the sum total of marks for all school subjects involved in the entrance examination, the coefficient being 0.41. They were also correlated with the total marks of Chinese, English, and mathematics, the coefficients being 0.274 and 0.175 for Mathematics Sections A and B respectively, the age factor having been partialled out in all cases. Thus, this test is a measurement not of special abilities but of general intelligence. (See XV: 575.)—*C. F. Wu* (Academia Sinica).

568. Hwang, C. M. [Directions for Hwang's revision of Pintner-Cunningham Primary Mental Test.] Shanghai: Commercial Press, 1937. Pp. 29. \$0.45 Mex.—The book reports in detail the works of a Chinese revision of Pintner-Cunningham Primary Mental Test on the basis of the testing results of 3423 children in 25 districts (where there were Commercial Press branches), the age limit being 4-9 years inclusive; as well as the administering procedure, directions (general and separate), ways of scoring, and interpretation of the test. The 7 tests adopted are all pictorial in nature, each preceded by a preliminary one, and are printed in a separate pamphlet. Both T-scores and mental age scores have been computed. This revision had been applied 4 times in Shanghai. The first and second try-outs were administered to children of 6-9 years old and the self-correlation found was 0.93 ± 0.03 . The third and fourth try-outs were administered to children of 4-6 years old, and the self-correlation found was 0.94 ± 0.01 .—*C. F. Wu* (Academia Sinica).

569. Liermann, G. Der Intelligenzprüfungsbogen nach Anlage 5a der ersten Verordnung zur Durchführung des Gesetzes zur Verhütung erbkranken Nachwuchses in seiner Anwendung bei Jugendlichen in der Stadt Königsberg i. Pr. und dem Samland im Alter von 14-18 Jahren. (The intelligence test form according to appendix 5a of the first ordinance for the execution of the law for the prevention of congenitally diseased progeny in its application to adolescents of 14-18 years of age in the city of Königsberg i. Pr. and Samland.) *Öff. Gesundheits-Dienst*, 1939, 5, A244-A254.—[Abstracted review; original not seen.] 260 normal and feeble-minded adolescents of both sexes were examined. Teachers' judgments were largely confirmed. The test is considered "a considerable contribution to the diagnosis of feeble-mindedness." Though final diagnosis cannot be based on the test alone, it affords good leads. Questions included are: What is the difference between an attorney and a district attorney? What causes day and night? Who was Bismarck? These and some of the arithmetic problems were not answered correctly by many of the normal group.—H. L. Ansbacher (Brown).

570. Reymert, M. L., & Meister, R. E. A comparison of the original and Revised Stanford-Binet intelligence scales. *Psychol. Bull.*, 1940, 37, 572.—Abstract.

571. Saltzman, S. The influence of social and economic background on Stanford-Binet performance. *J. soc. Psychol.*, 1940, 12, 71-81.—A group of 140 first-grade children from a poor economic and social environment showed relative superiority over a group of 114 first-grade children from a favorable environment on Stanford-Binet Test items involving counting, handling of money, and sensory discrimination. The group with favorable environmental conditions showed relative superiority on tests involving vocabulary and verbal composition, rote memory, motor control, and similarities and differences. Children from good environments seemed brighter because of a more alert manner, greater talkativeness, and a more attractive appearance, even when the IQ's were the same. Less difference between the groups was found on the Goodenough drawing tests than on the Stanford-Binet test.—G. Brighthouse (Occidental).

572. Seder, M. The reliability and validity of the American Council Psychological Examination, 1938 edition. *J. educ. Res.*, 1940, 34, 90-101.—Study of the results from 106 eleventh-grade boys. Correlation scores were obtained for odd-numbered items with scores for even-numbered items, and the reliability was estimated for the whole by the Spearman-Brown formula. There is also comparison of reliability coefficients for the 1935 and the 1930 editions by previous authors. Intercorrelations between different groups of tests were also studied. The author concludes that, although the 1938 edition has been considerably changed, it seems to be similar to earlier editions as far as the total score is concerned. There is justification for the grouping

of the parts of the test into quantitative and linguistic subtotals. The L-scores tend to be more highly correlated with measured achievement in English, foreign language, history, and science than the Q-scores; the reverse is true of correlations in the field of mathematics.—S. W. Fernberger (Pennsylvania).

573. Speer, G. S. Range of success on the Revised Stanford-Binet examination. *Psychol. Bull.*, 1940, 37, 572.—Abstract.

574. Strauss, A. A., & Werner, H. Qualitative analysis of the Binet test. *Amer. J. ment. Def.*, 1940, 45, 50-55.—Answers to certain Binet test items made by approximately 150 normal children, 150 high-grade mental defectives of the endogenous type, and a somewhat lesser number of delinquents of normal mentality were classified into 10 categories according to the logic of the reply. The children were all of the same mental age. Differences in the percentage distribution were apparent in the categories: nonsensical, ambiguous, wrong, and don't know. Normals gave less wrong and few nonsensical and ambiguous answers, but a high number of don't know answers. Delinquents gave more wrong answers and defectives more nonsensical and ambiguous answers. Explanation is offered of the probable reasons for reacting so.—M. W. Kuensel (Children's Home, Cincinnati).

575. [Various.] [Psychology and Tests.] Chungking: Cheng Chung Book Co., 1940. Pp. 138. \$0.70 Mex.—A reprint of selected papers appearing in *Educational News Weekly*. 5 important papers may be listed; these are: "Applications of psychology to education" (pp. 1-11), by E. Shen (see XV: 552); "On the experimental studies of psychology of learning Chinese characters" (pp. 29-41), by W. Ai (see XV: 113); "Origin of the traitor's mind" (pp. 97-101), by C. S. Chen; "The construction and application of an intelligence test for use in university entrance examinations" (pp. 102-112), by H. H. Hsiao (see XV: 567); and "The construction and application of an intelligence test for use in elementary school entrance examinations" (pp. 113-115), by H. H. Hsiao (see XV: 566).—C. F. Wu (Academia Sinica).

576. Wood, L. A new picture completion test. *J. genet. Psychol.*, 1940, 56, 383-409.—A new device for retesting performance on the Healy Test II has been developed and administered to 1026 public school children, 7 yrs. 6 mos. to 17 yrs. 5 mos. of age, in grades II-XII inclusive. It consists of 1 demonstration and 10 test items illustrating a school girl's day, with 60 pieces from which to select the inserts. Directions for administering the test, a scoring table, score-distributions for each sex and both sexes at each of 10 age-levels are given. Correlation coefficients are reported between completion test score and (1) Kuhlman-Anderson M. A.: .59 for 403 cases; (2) retest score (after 16.1 mos.): .75 for 258 cases; (3) Healy score (after 16.2 mos.): .53 for 234 cases.—D. K. Spelt (Mississippi).

[See also abstracts 253, 450, 487.]

CHILDHOOD AND ADOLESCENCE

577. Abramson, J. *L'enfant et l'adolescent instables. Études cliniques et psychologiques.* (Unstable children and adolescents. Clinical and psychological studies.) Paris: Alcan, 1940. Pp. xix + 390.—[Abstracted review; original not seen.] Over 1000 children at the Clinique Annexe de Neuro-Psychiatrie Infantile were studied in order to observe the nature and development of instability in children. Although unstable children display an inconsistent development in intellectual traits, their most characteristic differences are to be found in the affective area. Affective development is analyzed into 4 stages: (1) a stage of impulsiveness, indetermination, and external rather than a self reference during the first 2 years; (2) a self formative stage from ages 2-5 which results in a conflict between the self and the external world and is characterized by negative attitudes; (3) a stage of socialization from the 5th year to puberty; and (4) a final stage beginning with puberty and continuing through adolescence characterized by conflict, particularly in relation to sex, religion, social forms, and older people. With unstable children, the first 2 stages are apt to persist even through adolescence, while the appearance of the latter 2 is retarded.—E. E. Ghiselli (California).

578. Andel-Ripke, O. v. [The rhythm of growth, development, and resistance; variability and temperament.] *Ned. Tijdschr. Geneesk.*, 1939, 3194-3206.—[Abstracted review; original not seen.] At the end of periods of rapid growth the child shows reduced resistance. A similar principle is found in the mental and physical development of the child. The rapid development of motility, for example, is followed by the negative period of the 2nd and 3rd year of life. For proper care, knowledge of the developmental rate of the child is important. German summary.—H. L. Ansbacher (Brown).

579. Bakwin, R. M., & Bakwin, H. Psychologic care of the preschool child. III. *J. Pediat.*, 1940, 16, 357-374.—The authors discuss the normal attitude of affection and the abnormal attitudes of overaffection, overprotection, overindulgence, overanxiety, underaffection (which includes indifference, rejection, and parent-child antagonism), overauthority, identification, perfectionism, and parental incompatibility. Manifestations of behavior which arise from these unhealthy attitudes, as well as prophylaxis and treatment are discussed. Sibling rivalry is also treated from the standpoint of appearance, prophylaxis, and treatment.—E. Green (Bradley Home).

580. Barnhart, E. N. Stages in construction of children's drawings as revealed through a recording device. *Psychol. Bull.*, 1940, 37, 581.—Abstract.

581. Brewer, H. M., & Anderson, H. H. The measurement of the behavior of kindergarten children in relation to the teacher's dominative and socially integrative contacts. *Psychol. Bull.*, 1940, 37, 583.—Abstract.

582. Bühler, C. Clinical studies of mother-child relationships. *Psychol. Bull.*, 1940, 37, 586.—Abstract.

583. Chamberlain, V. *How you grow up.* London: Gerald Howe, 1939. Pp. v + 121. 2s. 6d.—[Abstracted review; original not seen.] This is designed as "an introduction to psychology for young people and their parents." The book consists of a number of brief chapters on widely selected topics of psychological and general interest.—F. W. Finger (Brown).

584. Chang, S. T. [The ethical sentiment in children.] *Educ. Rev.* (Chinese), 1937, 27, No. 3, 63-68.—This investigation aims at a survey of the graded affection or ethical sentiment of 334 children (186 boys and 168 girls, who were all brought up under the North China social environment and who were then 6 to 15 years of age) toward the 10 categories of family members, by means of Thurstone's paired comparison method. By permutation, 45 pairs of family members were presented to each child in the form of a questionnaire for comparison. The results showed that these children loved their family members in the following order, with scale value in parenthesis: 1. mother (2.077); 2. father (1.637); 3. grandmother (0.707); 4. elder sister (0.637); 5. younger brother (0.620); 6. elder brother (0.562); 7. grandfather (0.402); 8. younger sister (0.395); 9. grandmother-in-law (viz., mother's mother, 0.280); and 10. grandfather-in-law (viz., mother's father, 0.000). It is of interest to note that except for the case of younger sister, the female member always stands higher than the corresponding male.—C. F. Wu (Academia Sinica).

585. Clark, W. R. Radio listening habits of children. *J. soc. Psychol.*, 1940, 12, 131-149.—Questionnaires on radio listening habits were given to 505 children between the ages of 9 and 18. It was found that practically all types of programs were listened to and that whether or not a program will have a child audience depends largely on the hour of the broadcast. Programs of humor, variety, drama, and dance music had the highest listening frequency and the greatest population. Girls indicated a wider range of listening interests than did boys. Rural children showed an average weekly radio listening time of 18½ hours, city children, 12 hours. Preferences for programs of the dance, popular, and novelty types increased with increasing age. Children with higher intelligence ratings listen more to narrative, news, humor, and classical music programs.—G. Brighouse (Occidental).

586. Curran, F. J. The adolescent and his emotional problems. *Dis. nerv. Syst.*, 1940, 1, 144-147.

587. Dodge, H. L. [Ed.] Abstracts of theses for higher degrees conferred by the Graduate School of the University of Oklahoma in 1936. *Univ. Okla. Bull.*, 1939, N.S. No. 760.—Abstracts of theses for the doctorate of interest to psychologists are the following: Rinsland, M. O., "A test for measuring teachers' knowledge of the conduct and personality

of children from six to eight years of age"; Russell, V. V. P., "Handicapped children of Oklahoma and a suggested remedial program."—*M. O. Wilson* (Oklahoma).

588. Faris, E. The retrospective act. *J. educ. Sociol.*, 1940, 14, 79-91.—It is suggested that children's acts may be classified in 4 groups: the immediate act; the delayed act; the frustrated act; and the retrospective act. The retrospective act has as its goal the consideration of a former act and "there is a tendency for every action that is interesting or emotional to return to consciousness in retrospect. . . . It is in the retrospective act that objects are defined, attitudes formed, personality is determined, and character organized."—*D. G. Ryans* (Cooperative Test Service).

589. Ford, R. Children in the cinema. London: Allen & Unwin, 1939. Pp. viii + 232.—[Abstracted review; original not seen.] Taking cognizance of the fact that in normal times nearly five million children attend the movies each week in England, the writer presents a survey of and a tentative answer to a great many problems of social and psychological interest arising in this situation.—*F. W. Finger* (Brown).

590. Fromm-Reichmann, F. Notes on the mother rôle in the family group. *Bull. Menninger Clin.*, 1940, 4, 132-148.—The psychological and social rôle of the mother in the family changes according to various historical periods, countries, and cultures. It is not known to what extent the mother's attitudes are biologically founded and to what extent culturally. Psychoanalysis has not dealt adequately with the problem of feminine psychology. The ideal parental attitude should grant children the security of love as the fundamental psychological requisite for normal growth toward later freedom and independence. Sexual attraction to the parent of the opposite sex is less of a problem the more the general atmosphere of the home is warmly affectionate and stable. The American mother is too often domineering and overly severe.—*W. A. Varvel* (Chicago).

591. Gesell, A., & Ames, L. B. The ontogenetic organization of prone behavior in human infancy. *J. genet. Psychol.*, 1940, 56, 247-263.—Cinemanalysis of the prone behavior of 12 normal infants provided data on ontogenetic development of postural and locomotor activity from 1-60 weeks of age. 23 primary stages were distinguished and grouped into 4 cycles. Each stage was classified with reference to dominance of flexor or extensor activity and of unilateral or bilateral limb action. Each cycle began with a partial, temporary regression to less mature behavior. In the first cycle (10 stages, ending ca. 29 weeks) movement developed from bilateral arm-and-leg flexion to unilateral flexion with abdominal pivoting. The second 10-stage cycle, beginning with elevation of the trunk posteriorly, ended (ca. 45 weeks) with creeping. The third and fourth cycles ended with plantigrade progression (ca. 49½ weeks) and walking (60 weeks) respectively. Cephalo-caudal and proximo-distal

sequences appeared. Tables of stages, photographs, and a chart are included.—*D. K. Spelt* (Mississippi).

592. Grinstead, A. D. An observational study of the motility of school children, its consistency, and its relation to age, IQ, sex, and habitual amount of sleep. *Psychol. Bull.*, 1940, 37, 556.—Abstract.

593. Hartson, M. F., & Champney, H. Parent behavior as related to child development: II. Social maturity. *Psychol. Bull.*, 1940, 37, 583.—Abstract.

594. Hildreth, G., & Ingram, C. P. Selected references from the literature on exceptional children. *Elem. Sch. J.*, 1940, 40, 694-709.—A briefly annotated bibliography of approximately 100 publications on exceptional children is presented. The references are listed under the following 10 classifications: (1) subnormal children, (2) problem children, (3) juvenile delinquency, (4) gifted, (5) visually handicapped, (6) crippled, (7) deaf, and (8) delicate children, (9) speech defectives, and (10) general references. Some trends in this area are cited.—*P. A. Witte* (Northwestern).

595. Jennings, F. Preliminary investigation to determine the conformity of children to aesthetic principles in graphic art. *Psychol. Bull.*, 1940, 37, 555.—Abstract.

596. Jersild, A. T. Child psychology. (Rev. ed.) New York: Prentice-Hall, 1940. Pp. xiii + 592. \$3.00.—This is a revised and enlarged edition of a text that first appeared in 1933 (see VIII: 1404). New chapters on learning and growth; establishment of eating, feeding, and elimination habits; children's interests; and moral and religious concepts have been added and the sections on emotions and social behavior substantially revised and expanded. Citations to the literature are liberally supplied. Thoroughly up-to-date bibliography for each chapter; author and subject indexes.—*L. J. Stone* (Vassar).

597. Joël, W. Behavior maturity of high school and junior college students. *Psychol. Bull.*, 1940, 37, 592.—Abstract.

598. Kanner, L. Psychiatry in pediatric practice. *Dis. nerv. Syst.*, 1940, 1, 101-104.

599. Keneally, K. G. The remedial clinic at the Catholic University. *Cath. educ. Rev.*, 1940, 38, 400-403.—The Center for Research in Child Development at the university which will be primarily a general guidance clinic is described. Training functions include special programs for psychiatrists, psychologists, social workers, and remedial teachers.—*W. L. Wilkins* (Milwaukee).

600. Kerna, T. Über das Schicksal und den sogenannten Aufzuchtswert unreifgeborener Kinder. (The development and biological value of premature children.) *Wien. klin. Wschr.*, 1939, 52, Part 2, 834-836.—[Abstracted review; original not seen.] Premature children are biologically not less valuable, 60% showing normal and 30% less than normal intellectual development. In general it seems that language development of such children is retarded,

and that they are more emotional.—*H. L. Ansbacher* (Brown).

601. McGraw, M. B. *Neuro-muscular maturation of anti-gravity mechanisms as reflected in the development of a sitting posture.* (Film.) New York: Normal Child Development Study, Columbia Medical Center, 1940. 1 reel, 250 ft. 16 mm. \$10.00.—This film shows developmental changes in movements and posture as the infant achieves the ability to assume a sitting position. Development of anti-gravity mechanisms is revealed (1) by the manner in which the trunk is raised from a supine to a sitting position and (2) by advancing equilibrium control after the sitting angle is attained. The film demonstrates development of this behavior as exhibited by one child during the first 2 years. Also included are animated curves showing the age period when each phase is the most characteristic mode of behavior as exhibited by a group of 82 children who were observed over a period of years.—*M. B. McGraw* (Columbia Medical Center).

602. McGraw, M. B. *Neural maturation as exemplified in achievement of bladder control.* *J. Pediat.*, 1940, 16, 580-590.—Two sets of identical twins were studied to determine basic behavior changes accompanying voluntary control of micturition and to determine if a systematic training schedule alters the course of development. Records of the two children who were given systematic training indicated several phases, which were not altered by a training program, in the establishment of bladder control. Toilet training seemed to be most effective when behavior indicated that there was cortical participation in the act. There was no evidence of a basic physiological rhythm which could be used as a guide in the training program.—*E. Green* (Bradley Home).

603. Morgan, A. E. *The needs of youth.* New York: Oxford University Press, 1939. Pp. xi + 434. \$3.50.—[Abstracted review; original not seen.] This is a report concerning the general problems of adolescents and the activities of the organizations serving this age group. The data on which the book is based were gathered by visiting youth organizations in England, Scotland, and Wales, by talking with members and leaders of youth organizations, and by observing social situations at this age level. The first 2 chapters deal with the problem of transition from school to full employment, the author suggesting that additional schooling might ameliorate the difficulties. Other chapter heads include: finding a job, training for a job, legal status of the adolescent, the homeless boy and girl, and leisure and recreation.—*F. W. Finger* (Brown).

604. Northway, M. L. *Appraisal of the social development of children at a summer camp.* *Univ. Toronto Stud. Psychol. Ser.*, 1940, 5, No. 1. Pp. 62. \$1.25.—Part 1 of this study "consists of a discussion of the meaning of appraisal in the old and the new education and its relation to psychological points of view. Part 2 shows in some detail how appraisal has been made of one aspect of child development in

a summer camp; and Part 3 discusses the methodology of appraisal, and indicates that it might be extended and adapted for use in the elementary school setting." A private Canadian camp for girls from 12-17 years of age (80 in number) was the setting for this study. Data were collected by the use of the Moreno technique, which "consists of an individual choosing for himself his associates for any group of which he is, or might become a member." The test was given twice, near the beginning and end of a 4-weeks camp trip. Results show that there was little change in the social structure of the group as a whole, that there were very few isolated campers, that there was evidence of a widening of social relations during the summer, that new campers attained their positions in the group early, that skills were factors influencing acceptability in activities for which they were required, that success in direct personal relationships seems to be accompanied by high acceptability in the group, that last choices were less natural choices to make than positive choices, and that there are changes in individual relations within the group.—*L. M. McCabe* (Cambridge, Mass.).

605. Pintner, R. *An adjustment test with normal and hard of hearing children.* *J. genet. Psychol.*, 1940, 56, 367-381.—A personality test (Pupil Portraits) was administered to 1604 normal and 1397 hard of hearing school children, all in grades V-VIII in New York City schools. The data are presented for 4 groups in each sex: normal, slightly hard of hearing, extremely hard of hearing, and all hard of hearing cases. Hard of hearing boys were slightly less well adjusted, both in school and in the family, than normal boys and most of the differences were statistically significant; hard of hearing girls did not differ significantly from normal girls. Only if the extremely hard of hearing boys and girls were considered was there a marked difference from the respective normal groups.—*D. K. Spelt* (Mississippi).

606. Plantenga, B. P. B., & Veen, S. M. C. v. *[Child form and function. Parts I and II.] Ned. Tijdschr. Geneesk.*, 1939, 3318-3333.—[Abstracted review; original not seen.] An extension of Kretschmer's typology to children and infants, with discussion of the proneness of the types to different diseases. French and English summaries.—*H. L. Ansbacher* (Brown).

607. Powell, M. *The Fels child behavior ratings: initial report.* *Psychol. Bull.*, 1940, 37, 572.—Abstract.

608. Read, K. H. *Significant characteristics of preschool children as located in the Conrad inventory.* *Genet. Psychol. Monogr.*, 1940, 22, 455-487.—Items from the California Behavior Inventory for Nursery School Children were selected for study in order to determine the practicability of an abbreviated scale. The 129 items were submitted to 55 experienced clinicians and nursery school teachers. On the basis of their returns, an abbreviated inventory of 67 items "judged to indicate significant

aspects of a child's behavior" was worked out. The abbreviated inventory was then applied to a group of 4 year old children. Its value was indicated not only for understanding individual children and appraising their progress or change in behavior, but also as a training instrument for inexperienced teachers. The abbreviated inventory is presented.—*F. M. Teagarden* (Pittsburgh).

609. Rheingold, H. L., & Perce, F. C. Limitations in studying the mental development of adoptive children. *Psychol. Bull.*, 1940, 37, 572.—Abstract.

610. Russell, R. W. Studies in animism. II. The development of animism. *J. genet. Psychol.*, 1940, 56, 353-366.—By individual questioning with respect to the animate or inanimate quality of a series of objects, the authors investigated the animistic notions of 361 northern urban primary school children and 413 southern suburban and rural primary school children. The groups had significantly different median IQ's on the Kuhlman-Anderson tests. Analysis of the data shows that more than 91% of the cases could be classified readily according to Piaget's 4 stages of animism and an additional 7% fell into a no concept stage. Since each of the 4 stages shows a regular and characteristic development for both increasing MA's and increasing CA's, and since re-examination data suggest an orderly progression, it appears likely that individuals pass sequentially through this series of stages. This development is apparently independent of the sex, geographical and socioeconomic differences included in these groups, as well as of nationality, mental ability, and special nature training.—*D. K. Spelt* (Mississippi).

611. Simney, T. S. Our wartime guests—opportunity or menace; a psychological approach to evacuation. London: Hodder & Stoughton, 1940. Pp. 43. 6d.—[Abstracted review; original not seen.] Research assistants in the Department of Social Science of the University of Liverpool studied the problems of evacuation in the cases of 685 children, of whom 426 were still evacuated while 259 had returned home. They conclude that "the evacuation scheme, despite its voluntary basis has not entirely broken down 'because' the majority of the hosts behaved splendidly, and succeeded in making the children entrusted to them happy" and "a great number of the parents cooperated to the best of their abilities." That complete success was not attained is attributed to such factors as poor organization in the billeting of dirty, verminous, and enuretic children; removal of children by parents on impulse; unwillingness of some hosts to accept extra work and curtailment of freedom; and adverse public

opinion created by people who did not wish to cooperate. In 60% of those cases in which children returned home responsibility is assigned to the parents, in 30% to lack of cooperation of the hosts, and in 10% to undesirable behavior of the children. Low general standards of cleanliness and hygiene among the evacuees were indicated by the fact that 17% of the children were verminous and 9% enuretic. The author points out the need of the application of social psychology in the carrying out of evacuation.—*L. M. McCabe* (Cambridge, Mass.).

612. Smith, M. K. Measurement of size of vocabulary of children from 6 to 18 years of age (school grades 1 to 12). *Psychol. Bull.*, 1940, 37, 581.—Abstract.

613. Thompson, H., & Bearg, P. A. The behavior examination of infants as an aid to early diagnosis of central nervous system disease. *J. Pediat.*, 1940, 16, 570-579.—"The behavior examination is an important aid in the diagnosis of central nervous disease because through its varied situations, it elicits both integrated and specific aspects of brain functioning." Case histories are reviewed, illustrating the part the psychological examination played in diagnosing the presence of organic defects in two infants where ordinary pediatric and neurological studies had revealed no abnormalities. The authors stress the importance of a psychological examination for any child whose behavior is abnormal.—*E. Green* (Bradley Home).

614. Turner, E., & Eyre, M. B. A study of the emotional instability in elementary school students in grades four to eight. *Psychol. Bull.*, 1940, 37, 595.—Abstract.

615. Wang, M. [Pathogenesis and psychotherapy of tics in infancy.] *Neopsichiatria*, 1939, 5, 354-419.

616. Zeckel, A., & Kolk, J. J. v. d. Eine vergleichende Intelligenz-Untersuchung einer Gruppe erblich taubstummer und hörender Kinder mittels der Porteus-Intelligenz-Probe. (A comparative intelligence investigation of a group of children, deaf-mute by heredity, and hearing children with the Porteus intelligence test.) *Psychiat. neurol. Bl., Amst.*, 1939, 43, 141-150.—[Abstracted review; original not seen.] 100 deaf-mute children aged 7-15 years and a control group of 100 hearing children were given the Porteus maze test. The experimental group scored considerably lower than the control group. Deafness causes a mental retardation also in fields not directly dependent on language.—*H. L. Ausbacher* (Brown).

[See also abstracts 98, 161, 210, 336, 381, 395, 473, 478, 521, 571.]

